The Role of Aid for Trade in Building the Capacity of Developing Country Firms to Meet Sustainability Standards

Jim Redden

ICTSD

International Centre for Trade and Sustainable Development

Issue Paper

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LIST OF ABBREVIATIONS

AANZFTA	ASEAN, Australia, New Zealand Free Trade Agreement
AfT	Aid for Trade
ARDN	ASEAN Regional Diagnostic Network
ASEAN	Association of Southeast Asian Nations
CABI	Centre for Agriculture and Biosciences
CPPN	Ceramics Promotion Project of Nepal
DAC	Development Assistance Commission
DFAT	Department of Foreign Affairs and Trade, Australia
EIF	Enhanced Integrated Framework
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FTA	free trade agreement
GATT	General Agreement on Tariffs and Trade
GSTC	Global Sustainable Tourism Council
GVC	global value chain
HACCP	Hazard Analysis and Critical Control Point
IEC	International Electrotechnical Commission
ILO	International Labour Organization
ISO	International Organization for Standardization
ITC	International Trade Centre
LDC	least developed country
MFA	Multi-Fibre Agreement
NGO	non-government organisation
NORAD	Norwegian Agency for Development Cooperation
NTB	non-tariff barrier
OECD	Organisation for Economic Co-operation and Development
PACER	Pacific Agreement on Closer Economic Relations
SDG	Sustainable Development Goal
SMEs	small and medium-sized enterprises
SPS	sanitary and phytosanitary
STDF	Standards and Trade Development Facility
TBT	technical barriers to trade
TFA	Trade Facilitation Agreement
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
US	United States
WFTO	World Fair Trade Organization
WTO	World Trade Organization

FOREWORD

Sustainability standards are becoming increasingly important in the operations of global value chains, driven by higher customer awareness and strategies by lead firms to strengthen their social license to operate, meet regulations, and find new markets. Sustainability standards can play an important role in achieving the Sustainable Development Goals, by encouraging better social and environmental conditions underlying production processes in different parts of the globe.

When compliance requires firms to invest in new organisational and production capabilities, and management and technical skills, sustainability standards support their long-term competitiveness and upgrading.

Notwithstanding these opportunities, compliance costs to sustainability standards are often too high for firms in developing countries, in particular small and medium-sized enterprises (SMEs). Yet SMEs are the backbone of the productive sector in many developing economies, and are key for poverty reduction and job creation. Concerted effort is required to ensure SMEs benefit from the opportunities of participating in global value chains, and meeting sustainability standards. How can Aid for Trade support their upgrading and inclusion in this respect? What lessons can be drawn from Aid for Trade programmes so far? Are there sectoral and cross-cutting best practices to be offered?

With this study, Jim Redden, Director, Trade and Development, Economic Development Services Ltd., and Visiting Fellow at the Institute for International Trade, University of Adelaide, aims at providing policymakers, donors, and stakeholders with a menu of best practices and policy recommendations to cooperate effectively towards the inclusion and upgrading of SMEs in sustainability standards-intensive global value chains. The issue paper is part of a three-part series on social and environmental regulations and standards developed by ICTSD with the support of the German Federal Ministry for Economic Cooperation and Development (BMZ).

The objective of the ICTSD research series under which the present paper has been produced is to provide input into the policy debate on how developing and least developed countries can utilise value chains to achieve sustainable and inclusive economic transformation. We hope that this paper on sustainability standards, SMEs and Aid for Trade, and indeed the series, will prove to be a useful contribution.

Ricardo Meléndez-Ortiz

EXECUTIVE SUMMARY

One of the major contemporary challenges facing developing country firms, and especially small and medium-sized enterprises (SMEs), is the ever increasing number of regulations and sustainability standards required of them if they are to integrate into global value chains. The exponential increase in the complexity and diversity of standards and regulations—over 20,000 types of standards, according to the International Organization for Standardization (ISO)—is in response to a number of factors, including consumer demand for appropriate health, safety and environmental concerns, as well as demand for quality, efficiency and corporate reputation driven by the private sector.

On the one hand, sustainability standards serve to safeguard and improve the quality of products and services for consumers and contribute to better work conditions and a cleaner environment consistent with progress towards the Sustainable Development Goals (SDGs) of the United Nations (UN). When multinational companies or lead firms apply sustainability standards throughout their global value chains, opportunities arise for SMEs in developing countries to work with the lead firm on standards compliance. They can benefit from training or technology transfer, which in turn can have a positive effect on job security and higher disposable incomes with flow-on welfare effects to the wider community. A number of SMEs in developing countries have taken advantage of sustainability standards to integrate with new global or regional value chains producing innovative, niche products or services, for example utilising e-commerce to capture new markets in both developed and developing countries.

On the other hand, however, some SMEs miss out. Where they are not part of an existing value chain and where there is little to no local government or other capacity-building support from industry available, a number of developing country SMEs struggle to comply with sustainability standards. This paper finds that a key reason for the exclusion of some developing country SMEs from global value chains is their inability to meet the cost and deal with the complexity of compliance.

Recent consultations undertaken on the compliance needs of SMEs reveal a lack of awareness and information about sustainability standards, especially some of the detailed fair trade and organic sustainability standards required; the complexity of documentation and customs compliance; and lack of appropriate quality infrastructure and capital equipment as well as insufficient skilling of their workforces to be able to implement sustainability standards.

In this context, the paper focuses on the potential role that Aid for Trade (AfT)—aid designed specifically to assist developing countries in overcoming supply-side issues and capture the gains of trade—can play in assisting those developing country SMEs and small producers who are struggling to comply with the sustainability standards required by global value chains. Put simply, it examines how Aid for Trade can best assist developing country SMEs where little or no other capacity-building support is available.

A review of recent trends in Aid for Trade programmes shows that donors' priorities are already well focused on inclusive and sustainable growth, trade facilitation and private sector development, and that there are a number of interventions in place already targeting sustainability standards compliance. However, there is still much more that needs to be done, especially if AfT programmes are to more effectively reach the most vulnerable SMEs and provide flow-on employment effects for women, low-skilled workers and unemployed workers in local communities.

Lessons are drawn from a range of contemporary case studies examining the needs of SMEs and the role AfT has played in agricultural, fisheries, light manufacturing, including textile and clothing

industries, as well as in the services sector. Along with evidence from other research, these lessons allow us to derive a number of cross-cutting policy implications for future AfT interventions which are summarised in the policy recommendations which follow. They also include what are termed global or overarching recommendations for due consideration. All the recommendations are explained more fully in section 5.

Overall the study shows that the ability of vulnerable developing country firms to comply with sustainability standards can be significantly enhanced by well-designed AfT programmes. The question is how to design AfT interventions to maximise effectiveness.

To this end, the research, consultations and case studies point to the importance of AfT programmes that specifically target vulnerable SMEs which are often unaware or unable to afford compliance. Evidence suggests that while AfT programmes in support of compliance will differ across sectors to some degree, there are a number of cross-cutting areas in common. They include the importance of targeted training and capacity-building programmes for SMEs, the vital role of appropriate quality infrastructure, capital equipment and related servicing requirements, a strong emphasis on gender and poverty analysis of value chains, and they stress the importance of local ownership and market access, including through the leveraging of free trade agreements.

There is support for closer collaboration between AfT donors, sustainability standards organisations and the recipients (SMEs, industry bodes and local government), to ensure a more efficient leveraging and harmonisation of resources, policy coherence and again local ownership—essential for the long-term sustainability of AfT programmes.

It is concluded that the judicious application of Aid for Trade interventions for sustainability standards compliance should be enhanced as an important source of support for more inclusive development and more even economic growth consistent with the Sustainable Development Goals.

Policy Implications and Recommendations

CROSS-CUTTING IMPLICATIONS

Training

AfT interventions should tailor training and capacity building as follows:

- Specifically for developing country SMEs to be able to comply with sustainability standards.
- Target the training capacity role of international standards organisations such as ISO, World Fair Trade Organization (WFTO), Standards and Trade Development Facility (STDF) and ISEAL Alliance (originally International Social and Environmental Accreditation and Labelling Alliance), along with national and local standards organisations, to harness existing expertise in reaching the needs of SMEs.
- Consider extending the role of STDF to assist SMEs in compliance with technical barriers to trade (TBT) and other related sustainability standards in addition to sanitary and phytosanitary (SPS) measures.
- Enhance the technical skills of workers, both those inside the global value chain (GVC) at present and those outside the GVC in the local community, with a particular focus on young people.

Quality Infrastructure

AfT should focus on a two-pronged approach to quality infrastructure: the supply of institutions locally that assist with standards setting and compliance, while also seeking to ensure this infrastructure is serviced and maintained by trained SME staff and/or by local service providers.

Policy Implications and Recommendations

Trade in Services

AfT should increase its focus on assisting SMEs involved in trade in services, given the unique potential this sector offers for GVC integration.

Gender and Marginalised Groups

It is recommended that all AfT programmes conduct both a gender analysis as well as a poverty analysis to enhance inclusive compliance with sustainability standards.

Sustainable Financing

AfT programmes need to ensure they are consistent with local and national economic development objectives so that assisting in SME compliance with sustainability standards is embedded in the recipient country's national development plans and so that financing of the programme can continue once the initial donor funding of the AfT intervention is completed.

Market Access

There needs to be a sound political economy analysis from the outset to try and ensure that capacity building of SMEs will lead to improved market access into the economies of existing or potential trading partners.

South-South Market Access Opportunities and Developing Country Donors

AfT programmes can assist directly with South–South GVC integration and standards compliance. New developing country donors, as well as existing donors of AfT, should be encouraged to support initiatives in this area.

Leverage Trade Agreements

Wherever possible, AfT programmes in support of SME standards compliance could be leveraged from existing or future trade agreements, whether multilateral such as thruogh the World Trade Organization (WTO) Trade Facilitation Agreement (TFA), regional or bilateral free trade agreements (FTAs).

GLOBAL IMPLICATIONS

A. Increase AfT Resources for Standards Compliance across Categories 1, 2 and 3

Consideration should be given to increasing allocations across AfT categories 1, 2 and 3—trade policy and regulation, trade-related infrastructure and productive capacity building—in support of sustainability standards compliance.

B. Donor Coordination and Policy Coherence

AfT programmes need to incorporate close donor coordination and cooperation with sustainability standards organisations, recipient governments and industry associations, both for policy coherence and ongoing programme sustainability.

C. Further Research and Analysis

Further research could focus on specific value chain analysis, not just of sectors, but of specific industries and businesses within sectors, so as to more accurately assess how and where exactly in specific value chain processes AfT is likely to be most effective in support of small-scale and informal sector women traders and in support of SME compliance with sustainability standards.

1. INTRODUCTION

One of the major contemporary challenges facing developing country firms, and especially small to medium-sized enterprises, is the ever increasing number of regulations and sustainability standards required of them if they are to integrate into regional and global value chains. The exponential increase in the complexity and diversity of standards and regulations—over 20,000 types of standards according to the International Organization for Standardization—is in response to a number of factors, including consumer demand for appropriate health, safety and environmental concerns, as well as demand for quality, efficiency and corporate reputation driven by the private sector.

What this can mean for a developing country exporter of, for example, fresh bananas from the Philippines seeking market access to France is the requirement to meet some seven categories of standards, from food safety and health controls to labelling and marketing standards, with each category of compliance, each carrying a range of obligations and documentation requirements—a somewhat daunting prospect for a semi-literate farm producer in rural Mindanao.

The key purpose of this paper is to examine the potential role that "AfT"—Aid for Trade designed specifically to assist developing countries in overcoming supply-side issues and capture the gains of trade—can play in helping developing country firms and producers, like our Filipino producers, to comply with sustainability standards required by global value chains, and in this way to assist not only a particular producer, firm or sector but also contribute to sustainable development globally. A sustainability standard is understood in this paper as a standard which addresses the social, environmental or economic practices of a defined entity, or a combination of these. Sustainability standards can cover the final product or service developed or the processes involved in the delivery of the good or service (ISEAL Alliance 2013).

The next section of the paper begins by highlighting recent trends in global economic growth and trade, as well as the increase in use of sustainability standards, before examining the various types of sustainability standards and the particular needs of developing country firms endeavouring to comply with these standards. Section 3 overviews the nature and role of AfT and its potential as an important avenue of intervention to assist those developing country firms without support from other areas to comply with sustainability standards. Assisted by recent case studies involving developing country firms seeking to comply with sustainability standards, section 4 drills into more detail of how AfT can be utilised to address specific needs across sectors and value chains, especially of small and medium-sized enterprises. Section 5 brings together the lessons from case studies and recent research on how AfT can best be tailored to assist firms and sectors to comply with standards, and also how to maximise its general impact for long-term sustainable development based on progress towards the United Nations Sustainable Development Goals. It includes policy recommendations and conditions necessary for future AfT programmes to be effective in this endeavour.

2. THE CHALLENGE OF SUSTAINABILITY STANDARDS COMPLIANCE AND THE NEEDS OF DEVELOPING COUNTRY FIRMS

2.1 The Growth of Sustainability Standards and Challenges of Compliance

This section begins by examining the contemporary debate about the need for inclusive globalisation and the risks of exclusion if SMEs in developing countries are unable to integrate into the ever increasing growth of global and regional value chains at a time when most global institutions are predicting a gradual pick-up in global trade and economic growth rates. It then looks at the underlying reasons for the rapid expansion in the use of sustainability standards and the increasing role of sustainability standards organisations, multilateral, regional and local, in setting, facilitating and regulating these standards. The section then concludes with a close examination of the needs of SMEs seeking to comply with these new and expanding sustainability standards.

2.1.1 Globalisation, trade and the role of sustainability standards in inclusive growth

According to the "Global Economic Prospects" report released by the World Bank in June 2017, global economic growth should strengthen to 2.7 percent in 2017 as a pick-up in manufacturing and trade, rising market confidence and stabilising commodity prices allow growth to resume in the commodity-exporting emerging market and developing economies (World Bank 2017). India, for example, is expected to accelerate to 7.2 percent in financial year 2018 and 7.5 percent in the next fiscal year. The World Trade Organization is also forecasting that global trade will expand positively by up to 3.6% percent in 2017. (WTO, Press/800, WTO upgrades forecast for 2017)

These trends give room for tentative optimism, but if developing country firms are to participate in and benefit from this growth, and especially the more vulnerable, smaller firms and producers, it will be necessary for growth to be inclusive of these groups. One vital component for achieving this outcome is for these firms to be able to comply with a range of sustainability standards in order to integrate into global value chains and gain access to the markets of major trading partners.

On the one hand, these trends signal a potentially positive environment for firms in developing countries, with increased opportunities to innovate and integrate into niche markets, especially in the services sector. On the other hand, if they cannot participate and integrate into global value chains in order to benefit from these trends, we will likely witness further uneven growth globally with negative implications for sustainable trade and the achievement of the UN Sustainable Development Goals.

Arguably one of the most pressing challenges confronting global leaders and policymakers today is how to make globalisation and international trade more inclusive. Growth that is inclusive and benefits SMEs, low income communities, workers and women in developing countries is more likely to lead to less inequality and reduced conflict. Therefore, assisting firms and especially SMEs to comply with sustainability standards is not just an important capacity-building strategy for assisting private sector development in developing countries, but is equally important as a political-economic tool for more even economic growth and increased political stability.

The growth and expansion of sustainability standards can be very positive in this regard where it encourages greater inclusion through standardisation and harmonisation of product and service requirements globally, as well as by promoting transparency and fair competition between firms. As Kaplinsky and Morris (2017) point out, however, sustainability standards may also act as a mechanism for exclusion.

> The exclusion of small producers [in meeting compliance standards] takes both

"active" and "passive" forms. "Active exclusion" arises from the displacement from the chain of small producers who had participated in the chain before standards-compliance became widespread, and are then ejected from the chain. "Passive exclusion" arises because the demands of standards compliance are so high that small producers have no chance of entering the value chain in the first place. Both of these forms of exclusion can be observed.

They go on to suggest that for many larger and formal sector producers, who benefit from scale and already possess many of the necessary capabilities required to perform to required standards, the net balance is positive. But for other producers, particularly small-scale and informal sector producers, this is often not the case because they are unable to meet the often-high cost of compliance or unable to negotiate the complex rules, guidelines and documentation required.

Therefore, for many smaller and medium-sized firms and producers in developing countries, and indeed policymakers concerned with the spread of more even growth and the achievement of the Sustainable Development Goals, the challenge is: How can developing country firms achieve deeper integration with GVCs through standards compliance?

There are multiple ways to respond to this question:

- Is it up to SMEs themselves to form industry standards bodies or take other initiatives to develop an improved culture of compliance?
- Should multinational companies and lead private-sector firms and industry associations be taking more responsibility for improving standards compliance across supply chains?
- Is it up to local governments and the international donor community to intervene in the provision of capacity-building support and infrastructure development to assist firms in the compliance process?

Or perhaps it is all of the above? This paper will focus on the potential role of the donor community through Aid for Trade, but further research into these questions forms an important part of ongoing debate in the global value chain/standards compliance nexus.

2.1.2 The expansion of sustainability standards in GVCs

The expansion and growth in importance of regulations and sustainability standards can be seen as a result of two major developments.

The period after World War II saw the establishment of the General Agreement on Tariffs and Trade (GATT) to foster more open, fairer trade and reduce barriers to cross-border trade and investment. In 1995 this culminated in the formation of the World Trade Organization. The WTO consolidated the growth in international agreements and trade modalities that reduced the use of protectionist tariffs, quotas and subsidies distorting world trade. These events were accompanied by a simultaneous increase in the use of government regulations and standards, generally put in place to protect consumers but also, some would argue, as an alternative form of protection particularly used by developed countries concerned with a surge of cheaper agricultural and manufactured goods into their countries.

Second, Kaplinsky and Morris (2017) highlight the role of the corporate sector whereby a number of new restrictions on imports into high income countries were introduced in the form of sustainability standards and requirements. This occurred for several reasons, including the need to bring about conformity in quality and production systems throughout GVCs, as well as a desire to strengthen corporate brands and reputations in response to growing consumer advocacy for greater corporate social responsibility.

Kaplinsky and Morris then categorise sustainability standards along the triple bottom line of accountability in corporate social responsibility: time, quality and cost standards are introduced to achieve the financial bottom line, and labour and supply-

chain working conditions monitored and standardised to address the social bottom line and environmental supply-chain issues in pursuit of better environmental sustainability outcomes. Kaplinsky has also provided a useful categorisation of the drivers of many sustainability standards, from corporate-led to those driven by civil society.

Box 1: Four sets of standards widely observed in global value chains

- Corporate standards internal to the chain. They typically address quality, cost, delivery procedures and, increasingly, environmental processes. They specify the requirements of the lead firm (at the buying end of the chain) for supplier firms to ensure systemic chain competitiveness.
- Generic standards. They are industry specific or relevant across a range of sectors, such as ISO 9000 on quality and ISO 14000 on the environment.
- Standards set by governments. They include food safety and energy efficiency, and those set by international bodies including the European Union "farm-to-fork" food standards and vehicle emission standards
- Standards designed by civil society. They include labour standards, organic standards, and Fairtrade certification.

Source: Kaplinsky (2016)

Today, numerous types of sustainability standards, regulations and guidelines are in place across GVCs in most production and service sectors. It is a complex environment— not only are there many different standards in play, but there is much variation between sectors, governments, the policies of lead firms, and the quality of standards required depending on the destination market.

2.1.3 The role of standards organisations in the GVCs' sustainability nexus

Global value chains comprise "the full range of activities that are required to bring a product from its conception, through its design, its sourced raw materials and intermediate inputs, its marketing, its distribution and its support to the final consumer" (Duke CGGC 2016).

The traditional view of trade is that firms in each country produce finished products that are exported to consumers in another country. This type of trade represents less than one quarter of total trade in goods and services. Today, according to the UN Conference on Trade and Development (UNCTAD), approximately 80 percent of international trade consists of intermediate goods within GVCs (UNCTAD 2013).

We also know that one of major characteristics of GVCs is the increasing prevalence of the use of standards and regulations as a condition of entry. As Box 1 demonstrates, compliance standards can be set by governments wishing, for example, to ensure food imports meet necessary health safety and hygiene standards, or by lead private-sector firms such as multinational companies aiming to ensure quality standardisation and efficiencies across the production process. The former are often compulsory, set in law, while private and industry standards tend to be voluntary, even though failure to comply will often exclude firms from entry to the GVC.

The exponential growth in the number of standards required to gain entry into GVCs has seen a corresponding growth in the number of standards organisations established to define, facilitate, monitor and in some cases enforce the application of sustainability standards. It is instructive here to summarise the role of some of the major international standards organisations which play an important role in the governance

and monitoring of sustainability standards, in order to then assess the implications of their role for developing country firms in sections 4 and 5.

International Organization for Standardization

The International Organization for Standardization is an independent, non-governmental organisation. Its members are the national standards organisations of 163 countries. It is the world's largest developer of voluntary international standards and facilitates world trade by providing common international standards. ISO members are the foremost standards organisations in their countries and there is only one member per country. In Bangladesh, for example, the ISO member is the Bangladesh Standards and Testing Institution.

Over 20,000 standards have been set by ISO covering everything from manufactured products and technology to food safety, agriculture and healthcare. ISO standards are protected by copyright and most of them must be purchased. However, about 300 of the standards produced by ISO and the Joint Technical Committee of the International Electrotechnical Commission (IEC) have been made freely and publicly available.

ISO standards and guidelines also cover sustainability issues such as corporate social responsibility guidelines; for example ISO 26000 provides guidance on how businesses and organisations can operate in a socially responsible way. This means firms acting in an ethical and transparent way that contributes to the health and welfare of society.

ISEAL Alliance

ISEAL is a global alliance established to facilitate the strengthening of sustainable standards systems for the benefit of people and the environment. According to ISEAL, a standard is normally developed by a broad range of stakeholders and experts in a particular sector and includes a set of practices or criteria, for example on how a crop should be sustainably grown or a resource should be ethically harvested.

Figure 1: ISEAL principles for the development and management of standards

Source: ISEAL Alliance (2013)

As noted earlier, sustainability standards can cover the final product or service developed or the processes involved in the delivery of the good or service, for instance, responsible fishing practices that don't endanger marine biodiversity, or respect for human rights and the payment of fair wages in a garment factory or a tea plantation (ISEAL 2013).

The ISEAL Credibility Principles underpin effective practices for sustainability standards systems, supporting those systems to achieve more positive social, environmental and economic impacts, while decreasing negative impacts. ISEAL have put forward 10 key principles in the managing and development of sustainability standards, as summarised in Figure 1. ISEAL conducts a range of technical assistance and training programmes to assist member firms or organisations with compliance.

The Standards and Trade Development Facility

The STDF grew out of a joint communiqué issued by the heads of the UN Food and Agriculture Organization (FAO), World Organisation for Animal Health, World Bank, World Health Organization and WTO at the Doha Ministerial Conference in November 2001. In August 2002, the five organisations started discussing the creation of a partnership and a trust fund, with seed funding from the World Bank and WTO.

Trade in food and agricultural products offers a way for farmers, processors and SME traders in developing countries to increase their incomes and boost economic development. But despite the potential, they face many challenges, including a limited capacity to meet food safety standards and animal and plant health requirements.

The Agreement on the Application of Sanitary and Phytosanitary Measures entered into force with the establishment of the World Trade Organization on 1 January 1995. It concerns the application of food safety and animal and plant health regulations. STDF's global network brings together leading trade, health and agriculture experts worldwide to address persistent and emerging SPS challenges, while working on strategies and solutions to overcome these challenges. The STDF provides a platform for organisations to collaborate on SPS capacity-building needs, sharing experiences and good practice, leverage additional funding, and work on coordinated and coherent solutions.

Figure 2: UN Sustainable Development Goals

Source: United Nations (2017)

The STDF supports the Sustainable Development Goals including SDG 1, 2, 5, 8, 10, 14, 15 and 17, reinforcing the close relationship between sustainability standards and the SDGs. STDF has also collaborated closely with the WTO's Enhanced Integrated Framework (EIF) in helping developing country members meet SPS requirements through AfT and information-sharing programmes.

World Fair Trade Organization

The WFTO Fair Trade Standard is the heart of what's called a "guarantee system," focusing on the management and operation of fair trade organisations in relation to their fair trade practices. The WFTO Standard comprises a set of compliance criteria based on its 10 Fair Trade principles (Box 2) and International Labour Organization (ILO) conventions.

Box 2: WFTO 10 Fair Trade principles

Principle 1	Creating opportunities for economically disadvantaged producers
Principle 2	Transparency and accountability
Principle 3	Fair trading practices
Principle 4	Payment of a fair price
Principle 5	Ensuring no child labour and forced labour
Principle 6	Commitment to non-discrimination, gender equity and women's economic empowerment, and freedom of association
Principle 7	Ensuring good working conditions
Principle 8	Providing capacity building
Principle 9	Promoting fair trade
Principle 10	Respect for the environment

Source: World Fair Trade Organization (2017). Principles last revised and approved by WFTO members in October 2013.

The WFTO is concerned particularly with the social, economic and environmental well-being of marginalised small producers. Fair Trade buyers, recognising the financial disadvantages producers and suppliers face, ensure orders are paid on receipt of documents and according to various WFTO principles and guidelines.

WFTO organisations also have a capacity-building objective and aim to develop the skills and capabilities of their own employees or members while working directly with small producers to develop specific activities to help these producers improve their management skills, production capabilities and access to markets. All organisations that buy Fair Trade products through Fair Trade intermediaries in developing countries assist these organisations in developing their capacity to support the marginalised producer groups that they work with (World Fair Trade Organization 2017).

2.1.4 Local, national and international organisations across sectors

The range of intergovernmental organisations and international industry bodies concerned with the development of or monitoring of regulations, standards or guidelines that firms need to be aware of is significant and it is not the intention of this paper to list them all. In most industries, sectors or service areas, however, there is a relevant institutional body responsible for facilitating the development of and/or compliance with sustainability standards.

In the agricultural sector alone, we have the International Food Law Organization, the FAO standards body, numerous ISO standards covering farming, forestry and fisheries, International Federation of Organic Agriculture Movements, World Organisation for Animal Health, World Health Organization standards body and the STDF SPS requirements, as already mentioned.

Then there are regional and numerous local bodies in addition to the national ISO members that play a role in the formation, advocacy or certification processes for sustainability standards in agricultural production and associated services.

Membership of these organisations and compliance with the various standards a firm is required to meet involve not only the cost of membership but the significant cost of standards compliance, which may involve, for example, the purchase of infrastructure, the cost of laboratory testing or the training of staff.

Most policymakers would agree that compliance with international standards is now a sine qua non for entry into globalised production networks (Nadvi 2008). Developing country firms and farms are confronted by an array of distinct product and process standards that they must meet, whether driven by government regulation or more often by GVCs and lead firms concerned with triple bottom line accounting.

These standards vary considerably between markets, but importantly, compliance with these standards usually determines a firm's ability to gain market entry for their goods or services and, as a result, meeting the cost of compliance is not voluntary if firms aspire to expand, trade and achieve sustainable profits.

In sum, we have witnessed an exponential growth in the number of sustainability standards and the organisations which govern them and for most developing country firms there is no way to avoid them if they wish to trade into external markets. In this sense, sustainability standards can be inclusive or exclusive of developing country firms depending on their capacity to meet the various requirements. If the aim is to support more inclusive global economic growth on a more sustainable basis then the challenge is to assist these firms with compliance. It is worth noting that a number of standards organisations, including ISO, WFTO, ISEAL and STDF, all have capacity-building potential to assist SMEs, a point we shall return to later in this paper.

Given there are these various international organisations, national government departments, lead firms in the private sector and a range of other capacity-building resource bodies in place, we need to be clear about which private sector firms are most in need in terms of compliance, what their specific needs are and where some of the key gaps lie in terms of available support for compliance.

2.2 The Particular Compliance Needs of SMEs in Developing Countries

Multinational companies and lead firms in GVCs tend to ensure standards compliance of their own companies, subsidiaries and, in some cases, their subcontractors, as it is their own interest to protect their corporate reputation and profits with checks and balances along the value chain. Industry associations and national governments also provide a degree of regulatory support and business services that may assist developing country firms with standards compliance. So, which firms are missing out?

Clearly some firms, limited by size and capacity, may be unable to meet even the basic sustainability requirements and therefore are excluded from the value chain by the lead firm, and some may be unable to gain access to GVCs at all. Kaplinsky and Morris argue that regulations and standards can act as an absolute barrier to entry in GVCs. "This might be because the products which are produced do not meet the regulatory requirements of governments and are therefore not permissible imports. Or it might be that the lead firms in GVC set standards which suppliers are unable to meet" (Kaplinsky and Morris 2017).

They go on to identify two main types of exclusion of groups most vulnerable in relation to GVCs:

- The exclusion of small firms or producers who have no chance of entering a supply chain in the first place.

- Exclusion from within firms already part of a GVC but which are now unable to meet

increasing compliance costs, in particular, the cost of maintaining a literate and numerate, well-trained workforce requiring great segmentation of labour along with wage increases and better conditions.

The policy implications of these findings would suggest that developing country firms requiring interventionist support are generally small to medium-sized enterprises unable to meet the growing cost in general and human resource expertise required to meet compliance.

This is not to say that in some countries or industry-specific situations we should discount the potential role of medium to larger firms which may contribute importantly to poverty reduction through, for example, job creation, backward linkages and technology transfer. Indeed, in some cases larger firms may be better placed than SMEs in terms of their capacity and scale to undertake international trade that creates jobs and opportunities for locals. In these cases, some Aid for Trade programmes would best be targeted at measures such as the upskilling of young people and low income women to assist them into the job market for these larger firms. However, where the main obstacle to becoming a successful trader is the inability to meet sustainability compliance standards, larger companies are generally in a better position through their size and capacity to meet the costs and variety of compliance measures necessary.

In many developing countries, it is often SMEs run by women which are the most disadvantaged in conforming to sustainability standards because they also carry the burden of patriarchal economic and cultural systems that can deny access to key information, finance and infrastructure. In addition, there is also a growing number of younger people in developing countries faced with under-employment and insecurity who endeavour to find niche products and services using technological know-how and yet, as with women, often lack the awareness of standards, the access to finance and the skills to comply, undermining their ability to integrate into GVC workforces.

If we are seriously to address trends of uneven, non-inclusive growth and the inability of developing country firms to access GVC,s then it is necessary to focus on the needs of SMEs in general, but with particular attention to SMEs managed or operated by women and younger people. In this context, the following list of needs has been identified from recent surveys, literature, consultations and case studies.

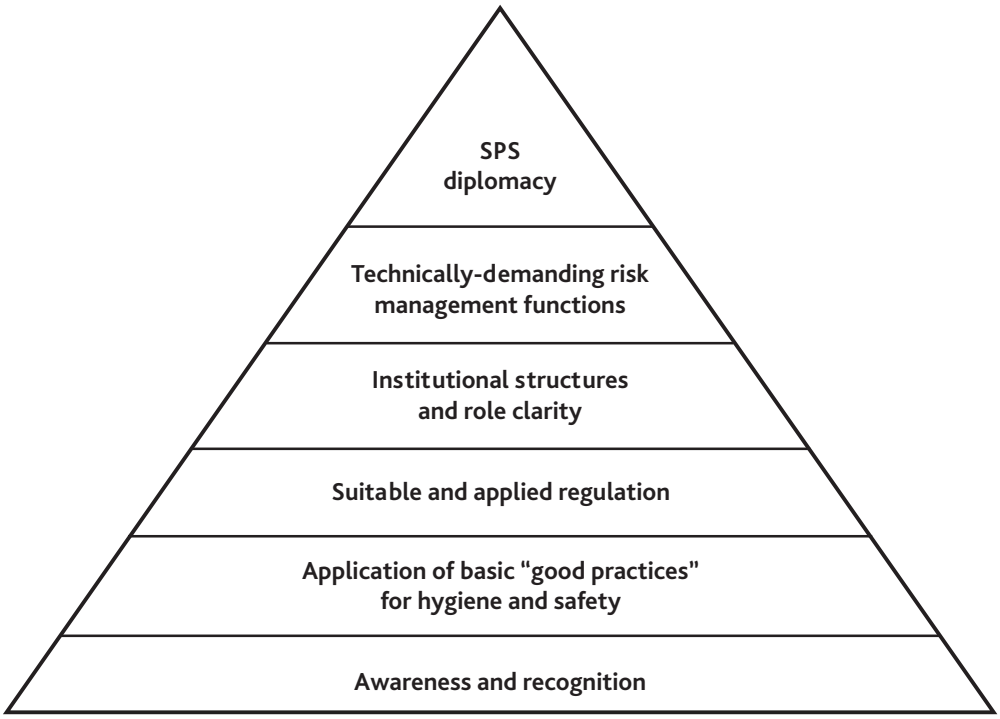
Awareness of standards

One of the most common needs identified by SMEs and small producers is access to information about the various standards required for GVC compliance. Women's textile SMEs from Cambodia, Sri Lanka, Mauritius and Bangladesh all highlighted specific difficulties in obtaining the appropriate information not only about the actual sustainability standard required but, in some cases, the necessary production process or type of testing required to meet the standard.

Foremost among requirements is information, with many suppliers and potential suppliers often being unaware of the basic preconditions and requirements for standards compliance. Although some lead firms driving GVCs do currently provide relevant information, according to Kaplinsky, often this information is made available reactively and what is required is a proactive campaign informing producers of what is required, and how they might achieve compliance.

STDF (2010b) provides a useful model of the hierarchy of SPS management functions helpful to firms wishing to comply with SPS requirements. A developing country firm needs to be familiar with awareness and recognition and then the use of sound practices in meeting SPS requirements. At the same time, the developing country government and relevant organisational structures need also to be in place to reach the top of the pyramid, where they are involved, for example, in negotiations and advocacy regarding the application or upgrading of SPS requirements in a particular area (Figure 3). Note, awareness and recognition is the fundamental first step of the pyramid.

Figure 3: Hierarchy of trade-related SPS management functions



Source: STDF (2010b)

Market intelligence

A related issue concerns information and intelligence on market access opportunities. Sustainability standards vary considerably between markets. The level of food safety requirements for market entry to Burkina Faso, for example, is significantly different from that required by the European Union (EU).

Apart from Trade Map of the International Trade Centre (ITC),[1] some government departments may provide a degree of market intelligence to SMEs. For example, a local semi-governmental body, Enterprise Mauritius, based in Port Louis, provides a selection of market intelligence tools for SMEs from Mauritius which includes information on prospective trading partners:

- country profile and economy
- logistic issues
- main imports of the country with respect to products that are produced in Mauritius
- Mauritius exports to the country
- products having Indicative potentials
- competitive analysis

Table 1, for example, informs a clothing exporter from Mauritius that while the South African market is dominated by Chinese imports, Mauritius SMEs have a competitive tariff advantage and hence a higher growth in imported value of Mauritius exports, so long as the preferential tariff remains in place. This is an example of tariff advice, but Enterprise Mauritius is also able to pass on other competitive analysis which can assist SMEs there in terms of market choice. However, there is limited advice on the required sustainability standards per industry due to the variation and complexity between sectors. It is difficult for a government body to keep track of all the various sustainability standards required across sectors in any country, let alone one in a smaller island country with limited resources.

1 **Trade Map** is a tool developed by the International **Trade** Centre (INTRACEN) whose objective is to facilitate strategic market research, monitoring both national and product-specific **trade** exports and imports by countries.

Table 1: Product 610449: Women's/girls' dresses, of other textile materials, knitted

Exporters	Importes values 2013 (US$ thousand)	Share in South Africa's imports (%)	Imported quantity 2013	Unit value (US$/ unit)	Imported growth in value between 2009-2013 (%, p.a.)	Imported growth in quantity between 2009-2013 (%, p.a.)	Tariff
World	6,015	100	82	73,354	42	53	
China	3,957	65,8	54	73,278	51	62	45
Mauritius	991	16,5	13	76,231	62	72	0
Lesotho	281	4,7	4	70,250			0
Bangladesh	102	1,7	1	102,000	211		45
United Kingdom	92	1,5	1	92,000	57		20

Source: Smart Export (2013)

The problem is that useful information and market intelligence often does not reach the smaller firms. Female SME traders consulted referred to lack of time as a major issue. Between childrearing, labour issues and home duty responsibilities, they tended to rely more on word of mouth from their own networks than on private or public sources of market data and information.

Cost of compliance

The significant cost of standards compliance, which may involve certification, the purchase of infrastructure, the cost of laboratory testing, packaging and labelling, the cost of membership to a relevant institution or the training of staff, can be a major obstacle for SMEs. Inspections from an authorised standards institution can cost around US$310, audits US$650 and laboratory testing, often required for export of agricultural goods but also for many manufactured goods, can cost in the thousands.

As Kaplinsky and Morris explain, "The first explanatory factor why disadvantaged groups such as small producers, small farms, women and younger producers may be excluded from the fruits of GVC participation is the costs of achieving the necessary certification. These costs may be trivial for large firms, but be very substantial for small or poorer producers" (Kaplinsky and Morris 2017).

In addition, the challenges of meeting the cost of standards compliance are not static. Kaplinsky notes that the *dynamic* nature of GVCs also means that competition and technology are moving frontiers and so the achievement of competitiveness (requiring standards compliance) in any one period of time does not ensure that this competitiveness will be sustained as the competitive frontier changes (Kaplinsky 2016).

This means that producers need to develop the capacity to constantly upgrade their product, service or production processes and hence standards in the value chain. In other words, meeting sustainability standards requires an ongoing cycle of continuous monitoring and business improvement to keep up with industry innovation and technological developments. The costs of doing this are not just confined to the payment for certification, labelling and testing requirements, but are generally dwarfed by the cost of the process changes required to meet the demands of lead firms in GVCs.

Standards organisations provide advice, technical assistance and training programmes to assist member firms or organisations with compliance, but most of these services are not free and SMEs struggle to meet these costs. Even with WFTO emphasis on supporting SMEs, compliance with Fair Trade standards and principles requires market intelligence and a sound knowledge and ability to implement the standards which are assessed by various means, including self-

assessment reports, a peer visit and through a monitoring audit—all costing time and money.

Conformity assessment

Conformity assessment may not only be costly but a serious time-waster, causing delays in the ability of developing country exporters to expedite goods to market in a timely fashion. Ensuring that appropriate and mutually recognised testing is in place where necessary is not always easy as the study in Box 3 illustrates.

The Sri Lanka Standards Institution is not recognised by EU importers, and samples of toy textiles therefore need to be sent abroad. Since Sri Lanka exports its toy textiles mainly to the EU and the United States, conformity assessment and financing these measures have become major issues for SME textile exporters.

Box 3: Sri Lankan toy textiles, EU standards and testing requirements

In 2011, the International Trade Centre conducted a survey of Sri Lankan companies that were affected by obstacles to trade. The report found that a range of non-tariff measures, including standards, were applied by trading partners. ITC's survey result found that non-tariff measures, including conformity assessment and related procedural obstacles, impeded textile exports of most products.

For example, while exporting toy textile accessories, a niche product for Sri Lankan firms exporting to several European Union countries, firms discovered the need to comply with complex and demanding European Union EN-71 safety regulations. This was complicated by the domestic testing facilities not being recognised as adequate. EN-71 standard includes requirements such as:

- EN 71, Part 1, Safety of Toys, Mechanical and Physical Tests
- EN 71, Part 2, Safety of Toys, Flammability Test
- EN 71, Part 3, Safety of Toys, Migration of Certain Elements

In addition to this, extensive testing expertise is often required by major retailers to ensure the quality and safety of their toy imports, including children's toys:

- sharp point and sharp edge verification
- pull test on small parts
- pull test on seams
- stuff checking for the plush toy
- metal detection test
- small parts verification
- workmanship check
- function/performance of product
- working distance check for remote control toys
- frequency check for electronic toys
- humidity test for the wooden toys

The complexity of conformity and safety requirements is significant and SME toy textile traders were struggling to meet these not just from the point of view of cost but of knowledge of the production processes to correctly implement them.

Source: Agencies' own websites.

Culture of documentation and customs compliance

Compliance with sustainability standards requires an organisational culture of good record keeping, documentation and, usually, sound database management and reporting skills.

In the shrimp industry in Bangladesh, most exporters are SMEs. Shrimp farming offers particular advantages for rural women who find it very attractive because it requires only a small amount of start-up investment and can be operated close to homesteads.

However, it is not easy for fish and shrimp exporters to obtain the various certificates and the set of documents, which vary from one importing country to another. Sometimes the requirements from the importers are so strict that companies cannot comply with them at all. Furthermore, it becomes difficult to prepare a complete and correct set of documents for every single importing country with significantly different requirements, especially for SMEs.

In addition to compliance with sustainability standards comes a range of customs information and requirements facing the SME trader. A developing country SME goods exporter will be required to understand tariff classification systems and rules of origin, customs valuation, tax and licence fee considerations, freight costs, insurance and container specifications, pre-shipment inspections and other trade facilitation options—all requiring knowledge, explanation and ultimately documentation. While some developing country customs authorities have improved their ability to run a one-stop-shop service facility, there is still a long way to go, especially for least developed countries (LDCs) and low income countries.

The recent AfT at a Glance report (OECD/WTO 2017) highlights the fact that a priority for SMEs, and in particular micro SMEs, is the need for action to streamline customs procedures for these firms. The reality for many SMEs, especially micro and smaller ones, is that they do not have the established culture of documentation required by most importing countries and/or lead firms and so they struggle to meet compliance.

Gender issues

GVCs impact differently on women for a number of reasons. Bamber and Staritz (2016) point to three key reasons:

- Women tend to be concentrated in fewer sectors (such as food production, textile and clothing, domestic and other social services) than men and on average earn lower wages that their male counterparts. They are far more likely to suffer from sexual harassment and lack of appropriate security.

- Women's response to potential opportunities in new economic activities is dampened by time constraints due to their primary responsibility for reproductive, care and unpaid work, such as domestic work, childcare, and caring for the sick and elderly. Poor infrastructure and services heighten this challenge for women in developing countries.

- Women also face a greater disadvantage in responding to new economic incentives because of gender differences in access to productive resources such as land, credit, education, skills, infrastructure, utilities and services (e.g. health, transport, water, electricity) and also information and networks.

Women either managing an SME or working for an SME in the business of international trade therefore face a particular set of obstacles in complying with standards, whether due to access to finance or lack of the time and skills to implement requirements in the production or service delivery process.

In a survey done on the needs of women traders and SMEs in South Asia (UNDP 2016), key issues identified as reasons for women SMEs either not engaging in GVCs and trade or opting out due to lack of capacity or support included:

- concerns regarding safety and lack of hotels and amenities at border crossings;

- male-dominated customs authorities discriminating against women traders—in some cases women are not allowed to deal directly with male customs officers;
- difficulties for Pakistani women surveyed in obtaining visas to travel;
- small-scale bribery exclusive of women;
- women SMEs needing to pay extra to hire men as intermediaries in trade transactions;
- high cost of transport and documentation complexity;
- lack of access to market information, compliance requirements and trade-related infrastructure, such as use of warehouses or appropriate storage facilities;
- trade-related fees for compliance and packaging costs,

While some of these issues may be common to male counterparts, such as high transport costs and complex documentation requirements, most of the issues are specific to women and are common to many developing regions, not just South Asia. There is a clear need to recognise that GVCs and sustainability standards are not gender neutral in their impact and that we therefore need more concerted efforts to both involve and empower women through training, advocacy and strategies that enable their successful participation in GVCs.

Appropriate infrastructure and servicing that infrastructure

Access to quality, trade-related infrastructure is cited by numerous SMEs as a vital component for meeting sustainability standards. While in some cases these may relate to major infrastructure developments such as high-grade cold storage facilities and a reliable source of energy to power them, for many micro and smaller producers the application of simple but appropriate technology and infrastructure plays a vital role in standards compliance.

This was the case with Mango So, a fruit and vegetable processing and export company based in Toussiana in the Hauts-Bassins region of Burkina Faso. Founded in 2001, 85 percent of its 200 workers are women and from its foundation, Mango So aimed to produce and export to Europe and South Africa.

A major challenge has been to meet strict environmental food safety and SPS import requirements and to obtain the Hazard Analysis and Critical Control Point (HACCP) certification, as well as meeting strict organic certification requirements in partnership with its suppliers. A key issue for about 50 local partner producers, as part of the Mango So supply chain, was that most of them used wooden tables to cut and process their mangoes and the wood was prone to pest and soil contamination. In addition, the food quality and efficiency of the production process relies significantly on drying tunnels.

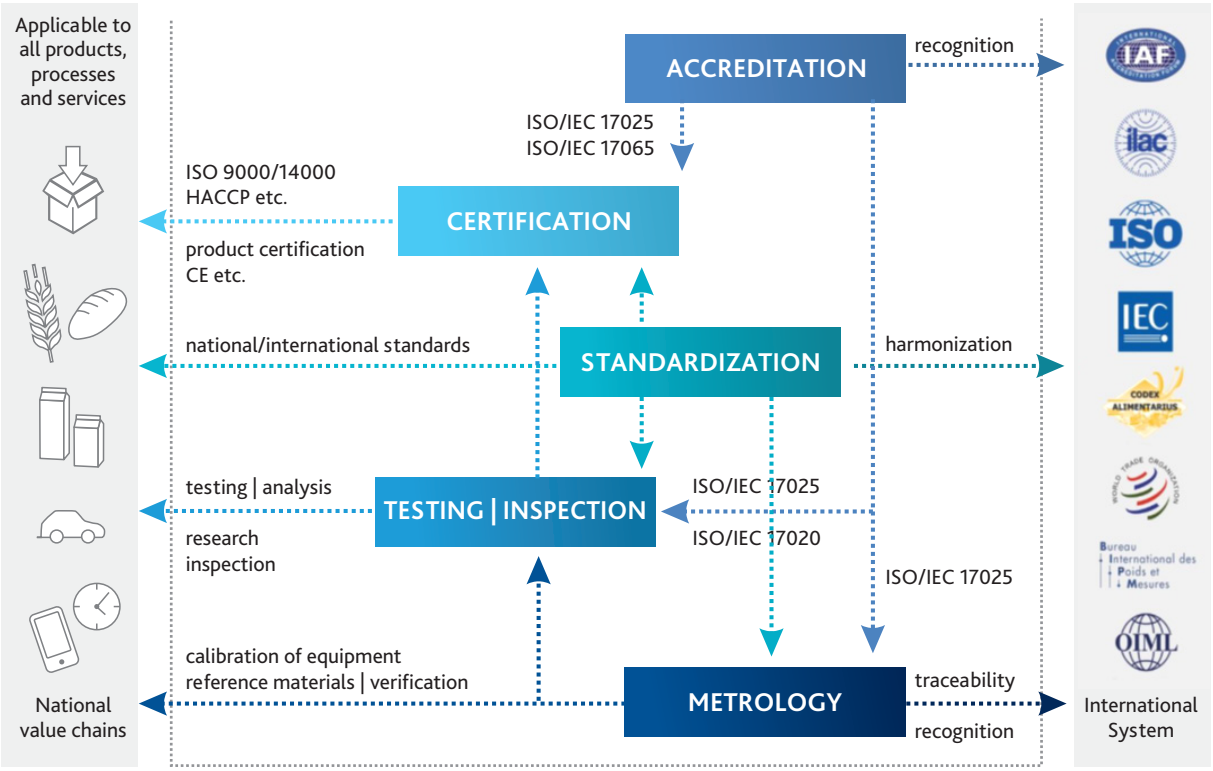
The costs of both HACCP and organic certification are considerable and maintenance and servicing of equipment therefore essential. As we shall discuss later, AfT was able to assist in the provision of steel tables and quality drying tunnels, enabling Mango So to meet the required standards. For Mango So, and other SMEs in similar situations, the need is for appropriate and, where possible, affordable infrastructure that can either be serviced locally at a reasonable rate or where their workers can be trained to maintain and service the equipment themselves.

In this case, the need is for Mango So's mainly women workers and suppliers to be continually updated with appropriate technological advancements in agricultural production methods as well as maintenance of drying tunnels in the factory, in order to continue to meet standards.

SMEs also point to the lack of local quality infrastructure and institutions to help them meet compliance. In some cases, SMEs reported having to pay thousands of dollars to foreign inspectors for HACCP certification, due to the lack of local institutional capacity.

Local quality infrastructure in support of accreditation, certification, testing and inspections, metrology and standards would go a long way to reducing the costs and compliance needs of SMEs in developing countries.

Figure 4: Quality infrastructure—a complex network



Source: Germany Federal Ministry for Economic Cooperation and Development (BMZ) et al. (2017)

Figure 4 clearly illustrates the complex network of potential processes required for firms to comply with relevant standards and hence the need for local quality infrastructure.

Human resource skills both within and outside of SMEs

In Bangladesh, it was necessary for one textile and clothing SME, run by a female entrepreneur and with a staff of 26 mainly women workers, to re-evaluate its workforce based on the standard requirements in order to meet, among many other demands, "colour fastness" in its textile and clothing. Box 4 lists just 10 of over 100 specifications required to meet ISO standards for textiles, and illustrates the potential complexity and cost of compliance confronting developing country SMEs.

Apart from the need for stitchers, sewers, designers and packaging expertise, what was required here was expertise in monitoring and testing for standard requirements such as for colour fastness.

In countries in the Association of Southeast Asian Nations (ASEAN), there is a shortage of in-country taxonomic expertise services to identify plant pests and diseases. Such expertise is required by many SME agricultural producers to meet FAO, International Plant Protection Convention and SPS plant health and disease control requirements. The cost to SMEs of training local staff or hiring local expertise can be insurmountable and other solutions are required.

For some SMEs, the cost of compliance with human resource management and maintaining appropriate labour standards and conditions can also be forbidding. SA8000 certification, for example, is a management systems standard, modelled on ISO standards. It

Box 4: ISO 105 Textiles—tests for colour fastness

- ISO 105-A01:2010 Part A01: General principles of testing
- ISO 105-A02:1993 Part A02: Grey scale for assessing change in colour
- ISO 105-A03:1993 Part A03: Grey scale for assessing staining
- ISO 105-A04:1989 Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics
- ISO 105-A05:1996 Part A05: Instrumental assessment of change in colour for determination of grey scale rating
- ISO 105-A06:1995 Part A06: Instrumental determination of 1/1 standard depth of colour
- ISO 105-A08:2001 Part A08: Vocabulary used in colour measurement
- ISO 105-A11:2012 Part A11: Determination of colour fastness grades by digital imaging techniques
- ISO 105-B01:1994 Part B01: Colour fastness to light: Daylight
- ISO 105-B02:2013 Part B02: Colour fastness to artificial light: Xenon arc fading lamp test

Source: ISO standards catalogue, https://www.iso.org/standards-catalogue/browse-by-ics.html

measures the performance of companies in eight areas important to social accountability in the workplace: child labour, forced labour, health and safety, free association and collective bargaining, discrimination, disciplinary practices, working hours, and compensation. To implement all this requires skilled management and informed staff, often requiring higher wages and compliance costs. While the end result is good for workers and living standards consistent with the SDGs, the issue is that many SMEs are either unable to afford to upskill their own staff or to hire more expensive, qualified labour or experts to assist them in complying with standards and continuing to benefit from integration with a particular GVC.

Apart from managers and workers in an existing SME, in a number of low income communities SMEs also reported a general shortage of labour and in particular of younger people with the skills necessary for employment with their SME. A number of SMEs consulted stated the difficulty in finding the literate, numerate, medium to high skilled and technologically proficient labour needed for their businesses to meet sustainability standards. They noted the need to target vocational and youth skill development programmes, especially in low income communities—a point to which we shall return in section 5.

Given the significant needs of SMEs in meeting compliance, as outlined in the eight areas important to social accountability in the workplace, clearly there are gaps is the provision of support, whether that support be driven by a lead firm in the GVC, by local government or by a standards organisation. The next section therefore examines the potential role of AfT in meeting those needs, first from the perspective of its global objectives, target groups and effectiveness to date, and then looking more closely in section 4 at its capacity to address the specific needs of SMEs operating in different sectors and requiring different levels and types of support.

3. THE POTENTIAL ROLE OF AID FOR TRADE IN ASSISTING FIRMS TO INTEGRATE INTO GVCs

3.1 Overview of the Aims and Role of Aid for Trade

The need to help developing countries to participate in and benefit from global trade rules is virtually inherent in the founding principles of the GATT and the WTO. From 1955 onwards, Article 18 of the GATT recognised those member countries with an "early stage of development" or "low levels of living standards" and these were subsequently afforded a degree of special treatment. This was further reinforced in 1964 with the formation of a special GATT committee on trade and development which began to consider the links between aid and trade for the first time.

The Enabling Clause of 1979 introduced preferential treatment for developing countries and allowed for non-reciprocal free trade agreements between developed and developing countries under GATT law. Developing and least developed countries were granted special and differential treatment, which by the formation of the WTO in 1995 had expanded to a number of areas, including provisions offering flexibility of commitments, longer phase-in periods for the reduction of tariffs, provisions to safeguard the special interest of LDCs and stronger provisions for technical assistance.

As such, the concept of AfT is not really new and before 2005 was generally referred to as either trade-related technical assistance or trade-related capacity building. From 2005, trade-related capacity building was rebadged, reinforced and refined as AfT. The AfT Initiative was launched at the 2005 Hong Kong WTO Ministerial Conference, with the stated objective being to "help developing countries, particularly LDCs, to build the supply-side capacity and trade-related infrastructure that they need to implement and benefit from WTO Agreements and more broadly to expand their trade" (WTO 2005).

Furthermore, "effective AfT should enhance growth prospects, reduce poverty, complement multilateral trade reforms, and distribute the global benefits of trade more equitably across and within member countries" (WTO 2006).

This is significant. If trade is to be more equitable and inclusive of developing countries, then it follows logically for AfT to support private sector firms in developing countries to meet the requirements of sustainability standards lest they be excluded from GVCs and key markets and denied the global benefits trade can offer.

Trade policy experts have also noted the importance of the 2005 AfT Initiative, given that previous efforts to provide assistance within the context of trade negotiations were usually made on a so-called "best endeavour" basis. That is, trade negotiators made promises of additional trade-related assistance without the assurance that assistance would be forthcoming. The new AfT Initiative firmed up donor commitments to the supply of AfT (Higgins and Prowse 2010).

It was also recognised by WTO members that there were a number of internal as well as external barriers to trade that were limiting the capacity of developing countries to reap the full benefits from trade. While consecutive rounds of international GATT and WTO meetings had witnessed significant progress in the reduction of tariffs and trade-distorting quotas and subsidies, non-tariff barriers (NTBs) to market access remained increasingly pernicious.

Today, trade-limiting NTBs are of particular concern to developing countries and include, for example, significant barriers to the temporary movement of persons (labour mobility), the inability to meet standards such as SPS requirements, and a range of supply-side constraints, such as poor quality infrastructure. These all prevent developing countries from taking advantage of market access opportunities.

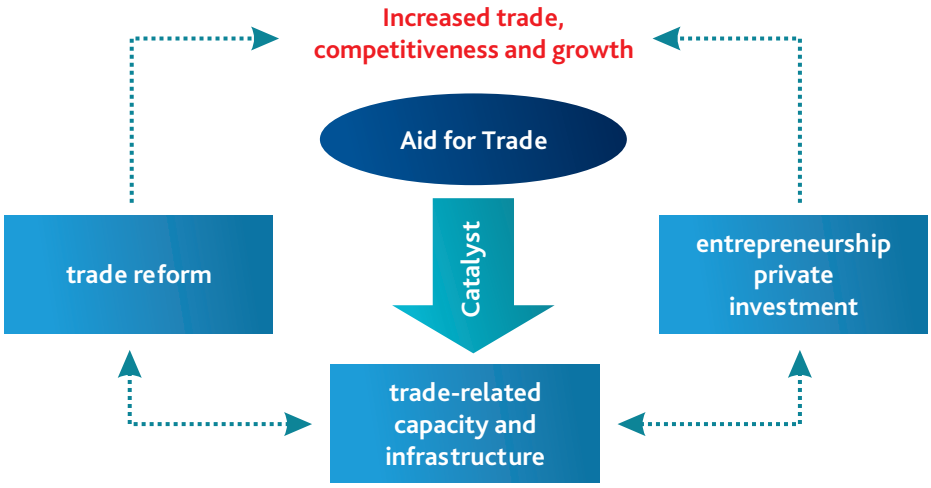
The role of AfT programmes is to recognise such barriers as major supply-side constraints

for developing countries and therefore their key aims are as follows:

- increase investment in economic and trade infrastructure as well as to improve the capacity of the private and public sectors in developing countries to capture the benefits of existing and future market access opportunities;
- enable developing countries, particularly LDCs, to use trade more effectively to promote growth, development and poverty reduction and to achieve their development objectives;
- help facilitate, implement and adjust to trade reform and liberalisation;
- assist regional integration and integration into the world trading system;
- assist in the implementation of trade agreements.

Figure 5 illustrates the overall purpose of Aid for Trade.

Figure 5: Purpose of Aid for Trade



Source: Author

Building the capacity of the private sector through technical support, capacity building and trade-related infrastructure are therefore central AfT objectives which align closely with the needs of SMEs in meeting sustainability compliance as outlined in the previous section. AfT is intended to support inclusive trade and development and, as such, can play a vital role in responding to the needs of SMEs, micro firms and women traders, whether that need be, for example, the provision of quality infrastructure, training in sustainability requirements, or through assistance in meeting with conformity assessment and customs documentation. As previously noted, there are clear gaps in the provision of such support to SMEs and, in lieu of interventions from lead GVC firms, the commercial sector or local government, AfT can play a strategic role is assisting those SMEs in need into relevant global or regional value chains.

3.2 Categories of AfT

The AfT Initiative at the multilateral level is facilitated by two specific mechanisms in order to facilitate the effective use and flow of funds between donors and recipients. The Integrated Framework of Trade Related Technical Assistance was established to assist developing countries mainstream their demand for AfT into their national development strategies, such as through their poverty reduction strategy papers, since these form the platform on which donors base their aid planning. Funds are provided through multi-agency coordination from the WTO, UNCTAD, World Bank, International Monetary Fund, ITC and United Nations Development Programme (UNDP).

For least developed countries, the Integrated Framework was extended with enhanced resources and a dedicated secretariat and called the Enhanced Integrated Framework. It provided a special mechanism for LDCs to tap into AfT. LDCs can channel their demand for AfT through the EIF process, involving Diagnostic Trade Integration Studies. The supply of resources is coordinated through local EIF institutions, such as the national EIF Focal Point, the National Implementation Unit and the Donor Facilitator (WTO 2017).

The EIF process consists of four phases:

- awareness building on the importance of trade for development;
- preparation of a Diagnostic Trade Integration Study to formulate a plan of action to integrate the country more fully into the global trading system while identifying those sectors of greatest export potential and those constraints that may impede trade;
- ensuring that this plan of action becomes part of the broader national development plan; and
- putting the action plan into place, including institutional and policy-related elements in partnership with the development cooperation community.

The EIF process is instructive in that, at least in theory if not in practice, it lays out a clear process whereby, if, for example, a member country identifies private sector compliance with sustainability standards and other NTBs as a priority issue in their national development objectives, then this should become a priority for the AfT donor community. Note that for most activities identified through EIF processes, resources for implementation have to be predominantly mobilised from other sources beyond the EIF Trust Fund, such as from regional or national donor funding sources. EIF can, however, provide catalytic funding which LDCs can use to leverage additional resources.

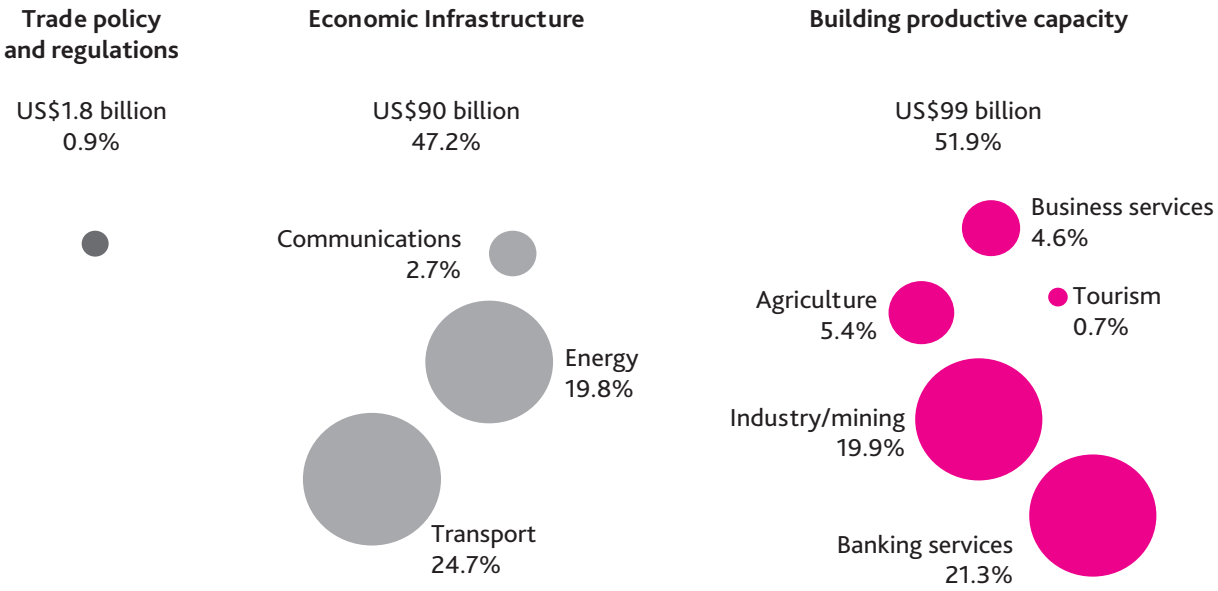
For purposes of classification and measurement of the effectiveness of AfT and based on Organisation for Economic Co-operation and Development (OECD) criteria, AfT is categorised into five categories, as set out in Box 5.

Box 5: Categories of AfT

1. Technical assistance for trade policy and regulations: comprising the subcategories of trade policy and administrative management; trade facilitation; regional trade agreements; multilateral trade negotiations; and trade education/training.
2. Trade-related and economic infrastructure: for example, building roads, ports and telecommunications networks to connect domestic markets to the global economy.
3. Productive capacity building: including trade development, focusing for example on support for the private sector to exploit its comparative advantages and diversify its exports.
4. Trade-related adjustment: helping countries with the costs associated with trade liberalisation, such as tariff reductions or identifying contributions to developing country budgets to assist in the implementation of trade reforms and adjustments to trade policy measures by other countries and alleviate shortfalls in balance of payments owing to changes in the world trading environment.
5. Other trade-related needs: if identified as trade-related development priorities in partner countries' national development strategies.

Most AfT funds are distributed in categories 1 to 3 and as such are the focus of the rest of this paper in relation to how effectively AfT can be used in assisting SMEs to comply with GVC sustainability standards. Note that the largest disbursement is for productive capacity building, which usually targets the private sector (Figure 6).

Figure 6: AfT disbursements 2006–2013



Source: OECD-DAC/CRS aid activity database (OECD-DAC 2017)

3.3 Quantity, Direction and Distribution

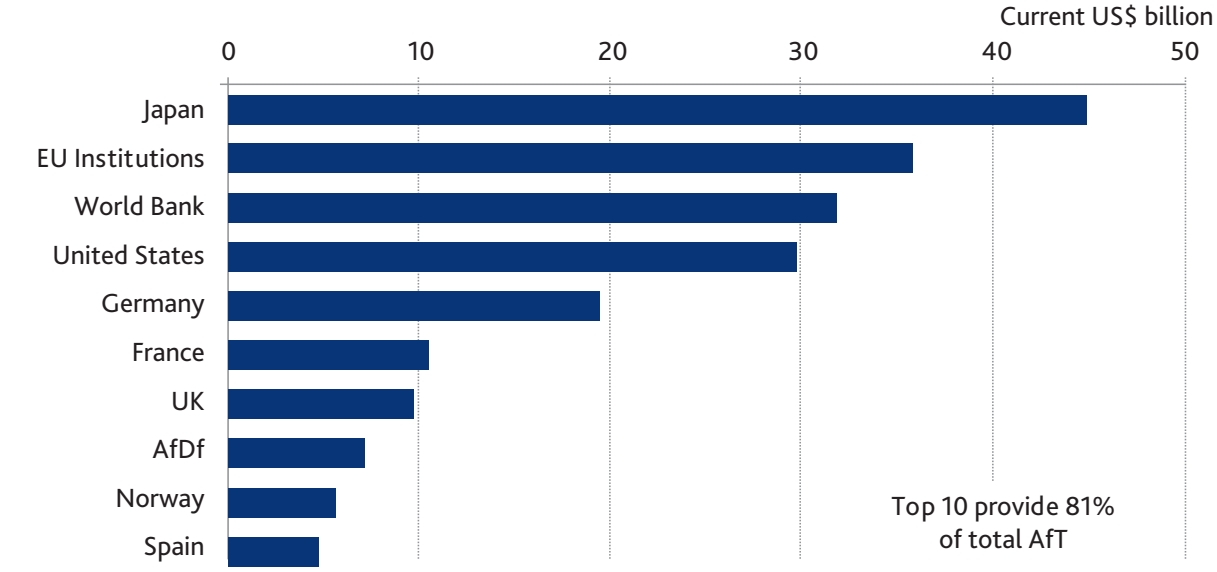
AfT has received considerable support from donors with its emphasis on driving competitiveness and greater inclusiveness through capacity building and infrastructure development. The share of AfT as a share of global official Overseas Development Aid has tended to increase over the years; for example, in 2013, commitments reached US$55.4 billion, an increase of US$1.8 billion in real terms compared to 2012 and an additional US$30.1 billion or 118 percent in real terms compared with the 2002-5 baseline average (OECD/WTO 2015).

Since the Aid for Trade Initiative was launched in 2005, almost US$300 billion has been disbursed for financing Aid for Trade programmes and projects, mainly in Asia (41.5 percent) and Africa (38.7 percent), with 27 percent going to LDCs (OECD/WTO 2017). Japan, European countries, the World Bank and the United States have been the major providers of AfT, with significant support from a range of smaller donors (Figure 7).

To date, more than three-quarters of total AfT has financed projects in four sectors: transport and storage (28.6 percent), energy generation and supply (21.6 percent), agriculture (18.3 percent) and banking and financial services (11.1 percent) (OECD/WTO 2017). In addition, over US$190.4 billion in trade-related other official aid flows has been disbursed since 2006, of which almost 80.0 percent has been provided by international financial institutions. Most of this is non-concessional funding and has supported projects in economic infrastructure (47.0 percent) and building private sector productive capacities (52.0 percent), and this has been almost exclusively in middle income developing countries (OECD/WTO 2015).

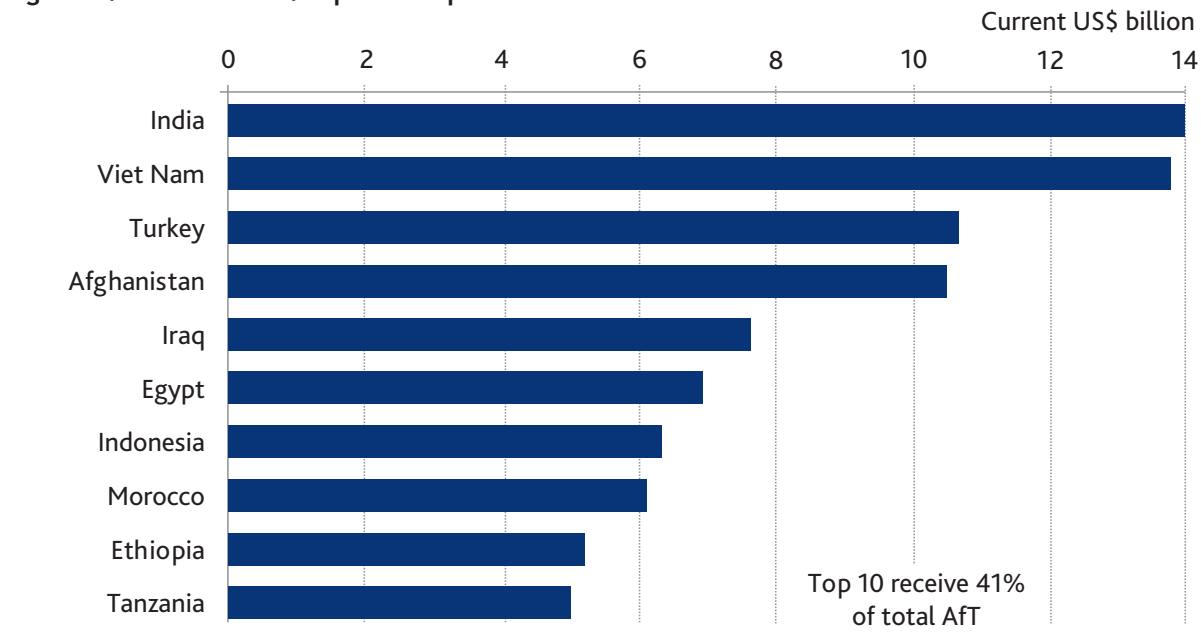
The top 10 AfT recipients received over 40 percent (US$86 billion) of total country-specific AfT disbursements from 2006 to 2013 (Figure 8). They consist of six countries in Asia and the Middle-East as well as four in Africa. Of interest, only Afghanistan, Ethiopia and Tanzania belong to the LDC grouping but it should be noted that the total population of these top 10 recipients is close to 30 percent of the total population of developing countries (OECD/WTO 2015).

Figure 7: Aid for Trade: top 10 providers



Source: OECD-DAC/CRS aid activity database (OECD-DAC 2017), 2006-2013.
Note: AfDF = African Development Fund.

Figure 8: Aid for Trade: top 10 recipients



Source: OECD-DAC/CRS aid activity database (OECD-DAC 2017), 2006-2013.

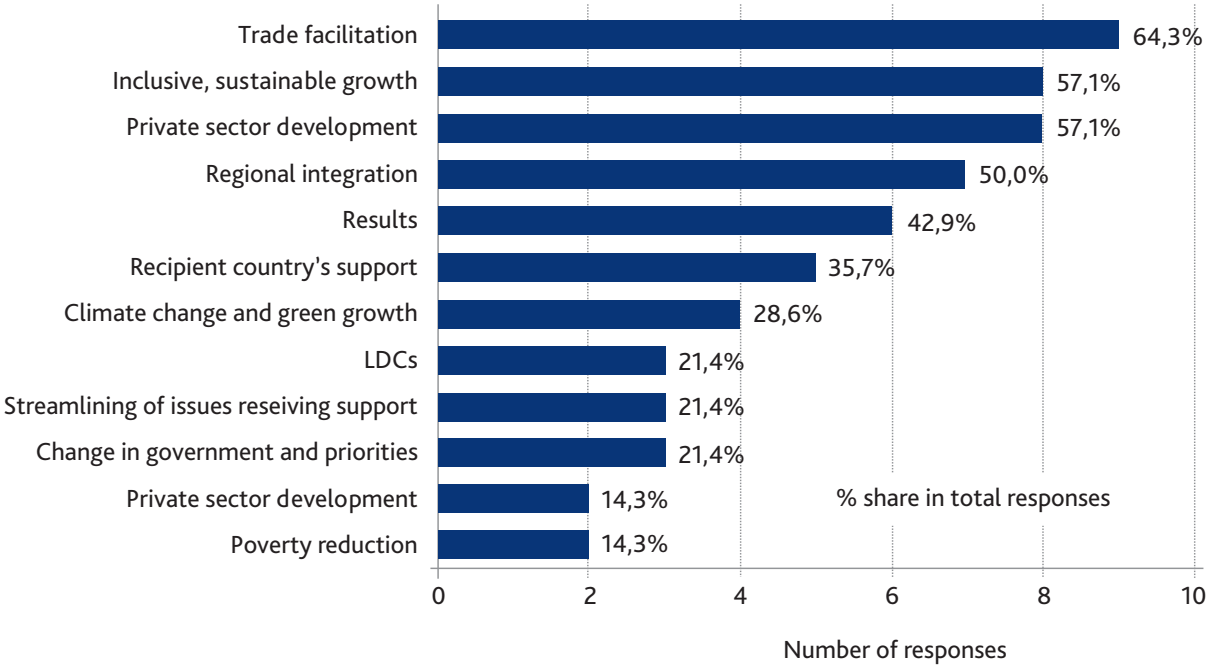
Apart from responding to demand-driven priorities of developing countries, the distribution of AfT is influenced by donor priorities and a complex range of geopolitical considerations. Overall, however, LDCs receive a reasonable proportion, as do lower middle income countries.

Figure 9: Aid for Trade disbursements by income group, 2006-2013

Source: OECD-DAC/CRS aid activity database (OECD-DAC 2017), 2006-2013.
Note: US$6.1 billion is disbursed to Other Low Income Countries. Abbreviations are LDCs - least developed countries, LMICs - lower middle income countries, and UMICs - upper middle income countries.

Donor AfT priorities show a strong emphasis on trade facilitation measures (which can include logistics, infrastructure development, customs reform and dealing with various NTBs), along with inclusive sustainable growth and private sector development (Figure 10). Of interest, most of these priorities and certainly the top four plus the climate change and green growth category are relevant to strategies to assist the private sector with sustainability standards compliance.

Figure 10: Donors' Aid for Trade priorities



Source: OECD/WTO (2015). Based on 14 respondents with multiple responses.

3.4 AfT Effectiveness as a Driver of Social Inclusion and the SDGs

3.4.1 Effectiveness of AfT

The significant amount of aid and other official aid flows devoted to helping developing countries build trade capacities through improving infrastructure and invigorating the private sector is showing results. Empirical studies support the presumption that trade liberalisation, under the right conditions, reduces poverty in the long run and confirms that AfT, in general, is effective at both the micro and macro levels (ODI 2013). But the impacts may vary considerably depending on the type of Aid for Trade intervention, the income level and geographical region of the recipient country and the sector at which the support is directed.

Ferro, Wilson and Otsuki (2012) found that a 10 percent increase in AfT to transportation, information and communications technology, energy, and banking services is associated with increases of 2.0 percent, 0.3 percent, 6.8 percent and 4.7 percent respectively in the exports of manufactured goods from the recipient countries (OECD/WTO 2015). This reinforces the importance of investment not only in trade-related infrastructure but also in key services, such as financial services. The standards compliance challenges for SMEs, identified earlier, confirm the need for appropriate infrastructure development as well as the need to maintain and upgrade the hardware.

Overall the OECD and WTO (2013) found that US$1 invested in AfT is on average associated with an increase of nearly US$8 in exports from all developing countries and an increase of US$20 in exports for the poorest countries. These empirical findings are confirmed by the anecdotal evidence to be gleaned from the 117 case stories that were submitted by the public

sector, the private sector, academics and non-government organisations (NGOs) in response to the 2015 call for these studies (OECD/WTO 2015). The case studies paint an encouraging picture of numerous donor-supported trade-related projects and programmes delivering a wide range of tangible results in terms of trade performance, private investment and employment creation in a large number of developing countries.

These studies reinforce earlier case studies on the impact of trade and AfT on poverty reduction in the Asia-Pacific region (Stoler, Redden and Jackson 2009), which concluded that sustainable poverty reduction is achieved if other appropriate conditions are in place, including:

- openness to international trade;
- a firm commitment in developing countries to domestic reform;
- a robust and socially responsible private sector;
- commitment by developed countries to AfT and technology transfer; and
- political stability and policy coherence.

Given the generally positive impacts of AfT, there is room for cautious optimism when considering the potential future impact in assisting SMEs with lower trade costs and compliance with sustainability standards.

3.4.2 The Sustainable Development Goals and AfT

Despite protectionist tendencies and likely cuts to aid in some economies such as the United States, medium-term prospects for continued increases in AfT allocations look promising. Twenty-one donors reported increases in AfT and only one donor a decrease, while seven donors were unsure what the future will bring. Looking ahead, 29 donors expected that in the next five years their Aid for Trade strategy would align with the post-2015 development agenda (OECD/WTO 2015). Further, almost all of these donors also considered that working with the private sector would be essential to achieving the Sustainable Development Goals.

There is already significant evidence to suggest that AfT can and does contribute to the SDGs. For example, a recent monitoring exercise asked both AfT recipients and donors about the potential role of AfT in the achievement of the SDGs (OECD/WTO 2017). They pointed to SDG 9 (industry, innovation and infrastructure) and SDG 8 (decent work and economic growth), in particular. Also frequently mentioned were SDG 1 (no poverty), SDG 2 (zero hunger) and SDG 17 (partnerships) (Da Silva 2017). I would also suggest that, under the right conditions, AfT can also either directly or indirectly contribute to SDG 5 (gender equality), SDG 10 (reduced inequalities) and SDG 12 (responsible consumption). Case studies in section 4 will reinforce this observation.

Kaplinsky and Morris (2017) note that those SDGs in support of growth and jobs can negatively impact on the environment and agricultural sustainability, for example through pollution or water contamination, and so there is a need at times for trade-offs. This is a valid concern and challenges policymakers and the private sector to seek sustainable trade and development solutions that can lessen the potentially negative externality impact of trade. AfT can play a small but useful role in this endeavour, not just through its support for SMEs complying with sustainability standards but also in its support for measures such as the use of green technology and energy efficiency combined with sustainable production processes.

As Lammersen and Roberts (2015) state, the post-2015 development agenda, with the SDGs at its core, suggests that the world should transform its natural resource-dependent growth pattern to a more inclusive and sustainable one. They argue that AfT can play a big role in supporting the SDGs if it can help developing countries build the capacities that in turn can contribute to a healthier environment and to fighting poverty. This is reinforced by Ancharaz and Sultan (2010), who conclude that AfT shares many of the objectives of the SDGs and if used

in “a complementary and reinforcing manner … may help build the economic resilience and supply-side capacity that LDCs need to adapt and mitigate climate change and therefore link to the world economy on better terms.”

3.5 AfT in Assisting Firms to Meet GVC Standards

AfT can play a useful role in helping to build the supply-side capacity and overall productivity of SMEs which otherwise would find it difficult to export or import. In addition to compliance with GVC standards, SMEs face a number of productivity challenges in order to become competitive at the global level. Achieving the high quality product or service standards required by GVCs, often with short lead times, is a major challenge for larger firms let alone for SMEs who may lack the knowledge, skills and capacity to respond rapidly as an efficient and competitive trader.

For example, in the design of AfT training programmes undertaken on behalf of the Australian government with a number of SMEs from Indian Ocean states, including Mauritius and Madagascar, one of the challenges for the trainers in partnership with the local chamber of commerce was to identify those SMEs which had reached a sufficient productivity and capacity level to be in a position to expand their business through trade. Thorough pre-course consultations and interviews helped to overcome the challenges and much of the training was then able to focus on the meeting of requirements, whether from customs, freight conveyers, banks, or as a result of GVC sustainability standards.

Given that a key aim of AfT is to build the capacity of the private sector to trade, it can and should be used to assist SMEs build the skills, knowledge base and ability to improve productivity wherever possible so that they are able to trade competitively in the first place, as well as then assisting them in the process of sustainability standards compliance. Often the two aims will go hand in hand for those firms that are ready to trade or close to that threshold.

As noted in section 2, there are a number of SMEs in developing economies which are priced out of international markets because of the high trade costs they face. These are caused by obsolete or ill-adapted infrastructure, limited access to finance, cumbersome and time-consuming border procedures, and the need to meet an ever broader array of public and private standards. AfT can play a vital role in assisting SMEs to address these obstacles.

Trade-ready SMEs and producers in developing countries can be competitive at the factory and farm gates but are limited in their capacity to expand their business by high trade costs. As part of the 2015 AfT at a Glance review, developing country firms were asked to list the most important sources of trade cost inhibiting their exports (OECD/WTO 2015), and the results can be seen in Table 2.

Increasingly, trade costs are being recognised as an important factor in determining the competitiveness of firms and thus are being prioritised both by recipient governments and AfT donors. Of note is that non-tariff measures, including standards, accounted for 79.2 percent of those involved in goods exports and therefore rank alongside trade facilitation/border issues and transport infrastructure as one of most pressing issues.

Busse, Hoekstra and Königer (2012) used panel data estimation for a sample of 99 developing countries for the period 2004–9 and showed that AfT and aid specifically for trade facilitation are closely associated with lower trade costs and therefore play an important role in helping developing countries benefit from trade. Importantly, they found the impact was not only significant in statistical terms but in economic terms as well. Cali and te Velde (2011) examined the impact of AfT on trade costs and exports and found that a US$1 million increase in AfT support for better trade facilitation is associated with a 6 percent reduction in the cost of packing, loading and shipping to the transit hub. These effects are even higher for exports of parts and components (OECD/WTO 2015).

Table 2: OECD/WTO survey on trade costs

What are the most importans sources of trade costs for exports?		
Answer Options	**Goods**	**Services**
Border procedures (trade facilitation)	83,3%	
Tariffs, fees and other charges	51,4%	
Non-Tariff Measures (including standarts)	79,2%	
Transport infrastructure	80,6%	68,1%
Network infrastructure (ICT, power, telecoms)	55,6%	77,8%
Access to trade finance	59,7%	
Other	4,2%	5,6%
Non-recognition of professional qualifications		44,4%
Restrictions on commercial presente		22,2%
Restrictions on movement of natural persons		44,4%
Poor regulatory environment for services		44,4%
Tariffs on product inputs (on computers for ICT services..)		19,4%
Low levels of skills in service sectors		43,1%

Source: OECD/WTO (2015)

While no similar study has been undertaken specifically on the impact of AfT on sustainability standards compliance, based on the evidence of AfT impact on other trade costs we might confidently predict similar results.

The importance of sustainability standards compliance should not be underestimated. The benefits not only accrue to developing country firms seeking to trade profitably, but also to the broader society at large, leading to better safety of food and industrial products, safer work practices, less waste and more protection of the environment. Sustainability standards provide the opportunity for sustained income growth, for an improvement in working conditions and health and safety, for the inclusion of women in GVCs and for the prevention of child labour, and in so doing represent important progress towards the SDGs.

The significant role for AfT then, as I have argued to date, is to focus on the needs of those firms and workers who are currently unable to comply, and who receive no help from other sources to comply with and benefit from meeting sustainability standards. AfT needs to focus on assisting those SMEs and small producers by reducing trade costs and compliance costs, while at the same time seeking to provide training and capacity building to workers both inside and outside the SME.

Given the evidence outlined in this section that most AfT expenditure this century has been distributed to categories 2 and 3 of AfT with their focus on trade infrastructure and private sector productive capacity, then it seems promising that AfT can play a small but increasingly significant role in assisting these SMEs with standards compliance as well as with training and upskilling pf women, men and young people to be well equipped to assist in the process.

Overall recent trends in AfT programmes show that donors' priorities are already well focused on inclusive and sustainable growth, as well as on trade facilitation and private sector development, and that there are a number of interventions in place already targeting sustainability standards compliance. However, there is still much that needs to be done, especially if AfT programmes are to more effectively reach smaller, micro and women-led SMEs and provide flow-on employment effects for low-skilled workers and for unemployed workers in local communities.

The following section, using a range of recent case studies, explores concrete examples of how AfT can specifically assist developing country SMEs, the local workforce and government regulators with compliance to sustainability standards.

4. SECTORAL ANALYSIS OF AID FOR TRADE INTERVENTIONS

Sustainability standards vary considerably among sectors and industries, meaning SMEs can face different types of trade costs and challenges when seeking to integrate with a relevant GVC. This section examines issues across four sectors of strategic importance to developing countries: agriculture, fisheries, small-scale labour-intensive manufacturing such as in textiles, clothing and pottery, and services trade. The various case studies chosen in each sector will (a) highlight the main issues and sustainable standards inhibiting trade; (b) discuss the role AfT has played and the impact on the SDGs; and (c) culminate with some initial policy implications of AfT interventions for that particular sector.

4.1 Fresh Food, Agricultural Exports and Standards

Fresh food exports are prone to disease and contamination and attract a range of health and safety standards to protect consumer health as well as environmental sustainability. From the importers' point of view, food imports can affect local agricultural productivity if pests, diseases or invasive alien species are not adequately prevented from entry and establishment in a territory. Typical sustainability standards include HACCP and SPS requirements. Research shows that NTMs, and particularly SPS (and TBT) issues, are among the primary constraints to trade in agriculture, thus providing evidence for the need for greater EIF (and AfT) focus on SPS matters (STDF and EIF 2016). The following case studies illustrate how AfT can constructively intervene.

4.1.1 Tongan watermelons

The challenge of sustainability standards

In 2010, New Zealand stopped importing watermelons from Tonga because of the high number of contaminated watermelon shipments it had received. Tongan watermelon growers were competitive in terms of production cost but were unable to consistently meet New Zealand's strict biosecurity regulations, particularly as they applied to fruit flies.

In order to meet sustainability standards, including New Zealand's biosecurity regulations, as well as HACCP certification, Tonga producers, a mix of female- and male-run small producers, needed appropriate infrastructure and food safety processes to be in place. Watermelon GVC export pathways require an efficient fumigation chamber as well as HACCP certification. This requires high standards of food production, storage, and sound monitoring systems for identification and control of health hazards, including contamination.

The role of AfT

Two key sources of AfT were able to gradually address the compliance needs of Tongan SMEs. Initially, the EU provided a fumigation chamber and supported improvements in some of the processing facilities. In 2011, the Australian-funded Pacific Horticultural and Agricultural Market Access programme began assisting Tonga's farmers, SME exporters and the Tongan Ministry of Agriculture to build their capacity to comply with New Zealand's biosecurity requirements and HACPP certification. Tonga's national development goals included private sector development and the growth of agricultural production, meaning that the AfT support it received strategically aligned with the country's national priorities and allowed for strong local ownership of the programme.

The support provided by the EU, and subsequently by Australia, included the following elements: a comprehensive review of production methods; assistance with post-harvest handling and export procedures; the delivery of training and training materials on standards compliance; the compilation of an operational manual and training for the use of the fumigation chamber; and the establishment of a project management team to oversee export pathway compliance in general.

AfT support has resulted in exports of watermelons increasing from 86 tonnes in 2010 to 271 tonnes in 2013. New Zealand imports

2,500 tonnes of watermelon annually and AfT has provided an opportunity for Tonga to grow its market share.

Impact on SDGs

Many Tongan families rely for their livelihood on retaining and improving their access to agricultural markets. The reopening of the watermelon export pathway to New Zealand, as well as the HACCP certification and the provision of the fumigation chamber for other agricultural products, has had a significant impact. Both female- and male-run SMEs involved in the production and export process have benefited from increased income, with positive welfare effects for the local Tongan community. In terms of the SDGs, it has directly contributed to SDG 1 (no poverty), SDG 5 (gender equality), SDG 8 (decent work and economic growth), and SDG 9 (industry, innovation and infrastructure). It is likely also to have had a secondary multiplier effect that will support Tonga's ability to achieve several other SDGs.

The important role of AfT provided through quality infrastructure and ongoing training is highlighted here. The support given for servicing and maintenance of the fumigation chamber is critical for maintaining and increasing market access. The next case study also reinforces this point.

4.1.2 Mangoes in Burkina Faso

The challenge of sustainability standards

Mango So is a fruit and vegetable processing and export medium-sized enterprise, based in Toussiana in the Hauts-Bassins region of Burkina Faso. Women account for 85 percent of its 200 workers.

The factory has 16 locally produced dryers with a capacity to produce 250 kilograms per day and three South African drying tunnels each with a capacity of 300 kilograms per day. It sources mangoes from 50 producers with whom it is a partner in the organic certification of its products. Currently the company's products are mainly exported to Europe (95 percent) and to a lesser extent to South Africa.

The challenge for Mango So has been to meet strict environmental food safety and SPS import requirements and to obtain the HACCP certification. One key issue for local producers was that most of them used wooden tables to cut and process their mangoes.

In addition, there are no accredited services (public or private) in Burkina Faso for HACCP certification. Producers need to request evaluation and certification services from other countries. Mango So embarked on the HACCP certification but struggled to obtain it due to the high costs. It received estimates that it would cost 10,000 euros for the certification process and 1,220 euros per day for a foreign consultant's expenses for the duration of the evaluation.

The role of AfT

Since 2014, the Enhanced Integrated Framework has targeted strategic support in the processing of mangoes, with strong emphasis on women's economic empowerment in capacity building, the meeting of standards and value chain addition. EIF provided new technology, including 60 quality steel tables for the local producers as well as for Mango So itself.

Apart from the EIF, Mango So also received support for the acquisition of a more efficient drying tunnel from the agriculture, forestry and livestock support programme funded by the World Bank. The use of a drying tunnel is a new technique for drying mangoes. It costs approximately 38,000 euros to purchase and install this facility.

The company then received training for its workforce on topics including market access; participation in trade events; more efficient production practices; hygiene and safety; and techniques for the use of processing equipment. This training helped to improve the quality of the products and help Mango So to comply with HACCP and SPS requirements.

As a result of EIF and World Bank AfT support in concert with the company's own efforts and commitment, mango-processing units produced an average of 70 tons of dried mangoes in 2015, which was up from 32 tons per unit in 2014. Dried mango exports totalled 1,208,000 kilograms, up from 460,330 kilograms in 2013. The project has also increased training and employment prospects for women workers already working for Mango So, as well as for those seeking work in the local community—as a result of the export business expanding. The company now has a production forecast of 120 tons for 2017.

HACCP certification has increased Mango So's access to other markets and the company has recently connected with new buyers and markets in Germany and Sweden. Unfortunately, the company was unable to conclude a new order for the Canadian market due to the multiple certificates requested by the importing partner. In addition to SPS and HACPP requirements, it also requested, for example, National Organic Production standard, kosher requirements, Fairtrade Bio and Bio South sustainability requirements.

Impact on SDGs

This case study shows that AfT can assist SMEs, in this case in Burkina Faso, to contribute to meeting SDG 5—achieve gender equality and empower all women and girls; SDG 8—promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; as well as SDG 17—strengthening the means of implementation and revitalising the global partnership for sustainable development.

The two agricultural case studies demonstrate the direct impact of AfT in assisting SMEs to meet sustainability standards, whether through the provision of training, technical assistance or infrastructure. More specific policy implications for this sector will be elaborated in section 5. Next we turn to the fisheries sector, where some of the standards and compliance costs are similar to agricultural food exports, given that with fish product exports we are again talking about fresh food or frozen exports for human consumption.

4.2 Fisheries and Standards

For exports of fish products, processing facilities must meet stringent quality and health standards. Poor sanitary conditions, lack of secure and healthy water supplies, poor personal hygiene, tropical climates, insects and rodents all increase hazard levels and make certification levels difficult for even well-trained, experienced authorities (STDF and EIF 2016). The following study from Bangladesh clearly illustrates the complex supply chain and standards compliance obstacles faced by the shrimp industry there.

4.2.1 Bangladesh and the shrimp industry

The challenge of sustainability standards

In Bangladesh, where the river system plays an integral role in the economy, fisheries and aquaculture provide a vital source of income and food security, employing a large number of the population in both inland and coastal communities. Export earnings from fish and fishery products stood second largest in 2014, next to ready-made garments, and as of 2015, the sector employed more than 17.8 million people (Department of Fisheries, Bangladesh 2015).

The shrimp[2] sector supplies the lion's share of the country's total production, employment and exports in fisheries and consists principally of SMEs and family businesses in Bangladesh. During the 1990s the Bangladesh shrimp export industry continued to expand due to high global consumer demand and the high prices being paid.

However, in 1999, the EU placed an export ban on Bangladesh's shrimp due to the detection of an antibiotic (nitrofuran) in its exported

2 Shrimp and prawns are closely related crustaceans. Shrimp is the common terminology for either crustacean in North America, whereas the rest of the world mainly uses the terminology, prawn.

prawn products (FAO 2014). The EU advised the Bangladesh government of the need for the industry to implement HACCP disciplines and for producers to gain HACCP certification before exports would again be permitted entry. Small producers and traders of shrimp in Bangladesh suffered severely from a lack of sustained access to the EU market and were generally unable to meet the quality and standards imposed by the EU and other international buyers from the US and elsewhere. Around this time, international organisations and buyers also introduced stricter traceability conditions and standards under the Bioterrorism Act. Table 3 summarises some of the main sustainability standards Bangladesh shrimp exporters faced.

Table 3: Types of standards and regulations introduced by different organisations

Date	Type of standard	Driver of standard
1964	Food hygiene rules	EU
2002	General food law	EU
2002	Traceability regulation	EU
2002, 2004, 2008	Food and feed safety regulations	EU
2003	International principles of responsible aquaculture	UN/FAO/UNEP/World Bank-Netherlands
2011	FDA Food Safety Modernization Act	US Food and Drug Administration (FDA)

Source: Selim Raihan (2017), compilation from various sources.

There were also a range of other NTBs and trade costs, for example in multiple documentation requirements, red tape and complexity of the shrimp supply chain. Bangladesh exports farm-produced shrimp mainly as 'processed frozen seafood'. Shrimp cultivation consists of several independent but interlinked activities, namely harvesting, culture (the artificial propagation and breeding of the shrimp), processing the shrimp and final preparation for export.

As a result, the shrimp industry consists of distinct subsectors, such as shrimp gher,[3] shrimp hatcheries or post-larvae collection points, feed processing mills, shrimp processing and exporting plants. The complex chain of shrimp production from farm to processing plants requires a network of intermediaries like faria (small traders), agents and depot holders (shrimp collection and service centre). It is only at the final stage that processors sell to international buyers. This complexity in the supply chain structure can result in loss of quality as well as loss of traceability. Ensuring food safety, appropriate hygiene and disease prevention across the supply chain presents major challenges for small exporters seeking HACCP certification and compliance with the other standards mentioned in Table 3.

The role of AfT

Building on the progress made as a result of the Bangladesh Quality Support Programme from 2006 to 2010, a new integrated AfT programme was established to try to assist the Bangladesh industry comply with sustainability standards and increase the overall output of quality shrimp product.

Better Work and Standards-Better Fisheries Quality (BEST-BFQ) and Strengthening of Fishery and Aquaculture Food Safety and Quality Management System in Bangladesh are programmes jointly funded by the European Union, Norwegian Agency for Development Cooperation (NORAD) and the government of Bangladesh and implemented jointly by the United Nations Industrial Development

3 Gher farming is a traditional agriculture system in Bangladesh. A pond is dug into a rice field to use for fish farming, with the dug-out soil used to create dykes around the pond for growing vegetables. See https://www.worldfishcenter.org/content/gher-farming-bangladesh

Organization (UNIDO) in cooperation with the Bangladesh Department of Fisheries.

A key objective of the AfT programme, implemented from 2010 to 2014, was to strengthen quality infrastructure along the fishery and shrimp supply chain so that Bangladesh producers and exporters could meet safety and quality requirements in export markets, especially the EU. Some of the specific activities included:

- institutional capacity building through harmonising the regulatory framework for controls along the supply chain;
- building compliance with and implementation of HACCP and traceability systems across the supply chain;
- improving the reliability and validity of testing for official controls;
- setting up of a vocational centre and laboratory for business operators;
- supporting initiatives to simplify the supply chain;
- improving the socio-economic conditions of low income target groups through the implementation and enforcement of labour law.

Strategies have been put in place to support these activities, including the provision of HACCP training programmes for producers, improved regulation along the shrimp supply chain, the provision of laboratory testing facilities in cooperation with the Bangladesh Food Exporters Association and technical assistance in support of better seafood health and safety processes generally. The achievements of the programme are summarised in Box 6. As a result the AfT programme successfully helped Bangladesh to become the only country in the South Asia region to have equivalency status with EU food safety requirements governing the safety of fishery products.

Box 6: Achievements of the BEST-BFQ AfT programme 2005–2010

- Two laboratories established and equipped with modern testing equipment for microbial and chemical analyses
- Laboratory staffs trained overseas in Good Laboratory Practices based on requirements of ISO 17025
- HACCP and Quality Assurance Programme improved in seafood-exporting enterprises to significantly accepted levels
- Over 1,500 inspectors and officials trained on Quality Assurance Programme/HACCP inspection, water quality, Good Aquacultural Practices and traceability
- Stakeholders trained in HACCP system and the implementation/upgrading of HACCP plans along the shrimp value chain
- Traceability system successfully introduced from factories to farms in the country (over 190,000 shrimp farms)
- Sources of nitrofuran and other antibiotics identified by investigations conducted by Bangladesh Agricultural University and University of Stirling (Scotland)
- Shrimp waste utilisation assessed and proposals for value addition developed
- Own-check facilities of 68 EU-approved processing establishments improved
- Awareness of harmful antibiotics, water quality and labour law created
- Cross-cutting gender-focused training on labour law 2006 (including TOT) conducted for female workers of processing factories
- Literacy programme, linkage, coordination and partnership building with NGOs, civil society and business associations established to create awareness
- Relevant training manuals, leaflets, brochures and posters produced

Source: BEST-BFQ (2016).

Impact on SDGs

The positive impacts of AfT support for shrimp farming and related activities in Bangladesh have increased employment, along with the growth of average wage rates in rural areas. This connects with SDG 1, poverty reduction and SDG 8, good jobs and economic growth.

Shrimp farming offers livelihood to people residing in remote coastal areas where there are limited alternatives for other employment and income-generating activities, in particular for women. For instance, rural women find it very attractive because it needs minimum investment and is close to homesteads. Women tend to be found in the more labour-intensive and insecure nodes of the shrimp value chain, undertaking various lower paid tasks such as fry catching,[4] so the emphasis on cross-cutting gender training and the upskilling of women workers was a very important aspect of the AfT intervention. Increased export earnings and economic diversity through the forward and backward linkages for both women and men which are created by the shrimp sector industry supply chain benefits overall community employment and the national economy as well. The AfT programme has therefore also played a role in supporting SDG 5 on gender, SDG 10 on reduced inequality, as well as on SDG 8 on good jobs and economic growth.

4.3. Textiles and Clothing in the Standards Nexus

For many developing countries, light manufacturing sectors such as the textile and clothing, pottery and handicraft industries remain important for exports and as employers of large numbers of women. The following case studies illustrate the importance of support for national and local standards organisations and of donor cooperation, market access and leveraging FTAs, while highlighting how AfT interventions have assisted SMEs and women to meet sustainability standards.

4.3.1 Everest Pottery in Nepal

The challenge of sustainability standards

The Nepalese region of Thimi, on the outskirts of Kathmandu, has been a centre for pottery for centuries. The tradition of pottery has been passed down the generations according to caste, with the Prajaparti caste being at the centre of the craft. Unfortunately, there has been a steady fall in local demand for pottery as plastic and metal receptacles proliferate. Plastic and metal have the advantage of being leakproof and inexpensive. Furthermore, the sector had seen minimal innovation over time and exports were, therefore, not on the agenda for Kathmandu potters.

Despite their undoubted skill, the potters in Thimi were using outdated technology. The clay-throwing equipment was unchanged from that used centuries before and was relatively inefficient. The kilns used to fire the pottery had a low maximum temperature that did not allow for glazed pottery to be fired effectively. This made the end-product prone to chipping and cracking, thereby limiting their domestic appeal and closing off any possibility of an export market.

Many of the potters depended on their craft as their main source of income and decided that they would need to upgrade their skills and pottery making if they were to stay viable as small community-based business operators. They formed a cooperative named Everest Pottery and faced two main challenges.

The first was to find assistance to improve the production process and quality of their pots, and the second was to explore the possibility of exporting their pots to niche markets such as through the Fair Trade system. In order to qualify for Fair Trade certification the potters were required to meet the 10 sustainability standards by the WFTO, including respect for the environment, non-use of child labour, the payment of fair wages, and other transparency and accountability standards.

4 Fry are young, post-larvae shrimp caught for harvesting. The fry are usually allowed to grow for about two months before being harvested.

The role of AfT

On the first issue, the German-funded project Ceramics Promotion Project of Nepal (CPPN) was the major catalyst for change for the potters of Thimi. The CPPN AfT project sponsored the building of more modern brick oven kilns for the potters. The kilns were specifically designed to use local materials, thereby making them more sustainable. These kilns operated at higher temperatures than the previous versions and allowed for the firing of glazed pottery. The end result was glazed pots that were waterproof and attractive to the export market.

CPPN also assisted through training on using modern pottery "throwing" techniques. This required the traditional potters to learn an entirely new way of making their wares, using a new flywheel that allowed them to cast more pottery and increase their productivity. It took about six months of training for the potters to achieve proficiency in using the modern flywheel.

On the second issue, Everest Pottery received support and guidance from the aid agency Oxfam regarding Fair Trade certification—one might categorise it as "aid for fair trade." Oxfam is a member of the World Fair Trade Organization and keen to support low income producers in developing countries in benefiting from trade. The Everest Pottery cooperative also decided to join Sana Hastakala, a leading Nepalese Fair Trade organisation. Sana Hastakala is accredited to export a range of ceramics, textiles and crafts through the Fair Trade label, mainly to developed countries, and supported the potters in marketing their wares. It helped Everest Pottery to comply with Fair Trade principles in its production and marketing process.

The result of the combined efforts from CPPN, Oxfam, the Nepalese Fair Trade Organisation and Sana Hastakala is that Everest Pottery currently supplies its glazed stoneware to customers across the world, including in Germany and Australia. In Australia, one of its main customers is Oxfam Australia Trading, which stocks a wide range of glazed stoneware. In 2016–17, Oxfam Australia Trading purchased over A$10,000 of glazed stoneware from Everest Pottery.

Impact on the SDGs

Everest Pottery has facilitated support for local artisans in a low income community benefiting both men and women potters. Everest Pottery employs a number of women, including a hearing-impaired woman who would otherwise struggle to find employment. Everest Pottery embodies innovation and the vital role of purchasing and maintaining quality infrastructure, as well as striving to achieve more sustainable standards through Fair Trade exports. The cooperative adheres closely to Fair Trade principles under the guidance of Sana Hastakala, and this allows Everest Pottery to contribute to decent work and economic growth. The work of the Everest Pottery has therefore had significant impact on SDGs 1, 5, 8 and 9.

4.3.2 Cambodia labour standards

The challenge of sustainability standards

In the 1990s, as Cambodia transitioned to a market economy, the garment sector was a key contributor to employment and foreign exchange.[5] From a very low base, the sector grew rapidly and by 2013 accounted for 16 percent of exports and for the employment of around 400,000 women, or 7 percent of the labour force (see Table 4).

Garments are part of a global value chain, with a large number of developing and least developed economies competing in two giant markets: the US and EU. China dominates production in the global garment market and heavily influences the GVC. Within this GVC it is possible to observe that the Cambodia garment market is made up largely of foreign,

5 Much of the information in this section is based on a case study on Cambodia's textile and garment industry undertaken by Peter Van Diermen (2009).

Table 4: The garment sector in Cambodia

	1995	2000	2005	2013
Exports (US$m)	26	965	2,169	4,970
Exports as a % of total exports	3	69	72	76
US share of exports (%)	0.2	76	71	41
EU share of exports (%)	98	23	23	35
Factories	20	190	247	559
Employees	18,703	122,644	283,906	400,000

Source: ILO (2015)

regional investors that generally own several production sites in the region. A number of small locally owned factories also operate in Cambodia, primarily as subcontractors to the large export firms.

Cambodia has also benefited from the development of the Multi-Fibre Agreement (MFA) under GATT. The MFA imposed a quota system on most large garment-exporting countries, attracting foreign investors from Hong Kong, Taiwan, Malaysia and Korea to Cambodia, taking advantage of its original quota free status. However, a major challenge for the sector was to comply with a number of regulatory changes brought about by its accession to the WTO in 2004, but more importantly an increase in a range of private and public standards and product requirements being imposed on textile and clothing producers wanting to export to developed country markets. Box 7 summarises the extensive range of sustainability standards required from developed countries such as the EU and US for textile and clothing exporters.

A glance through the range of standards listed demonstrates the complexity and costs challenging Cambodian SME producers aiming for compliance, particularly if they also wanted to meet global organic standards and Fair Trade marketing requirements. For the sake of brevity, this case study focuses on how AfT assisted SMEs in Cambodia to comply with social accountability standards, in particular SA 8000 incorporating key ILO standards and requirements regarding labour.

The role of AfT

AfT, through the Better Factories Cambodia programme, has played an important role in improving working conditions in Cambodia garment factories, providing SMEs and some larger factories as well with access to the US market and elsewhere. The Better Factories Cambodia programme grew out of the free trade agreement between the United States and Cambodia.

As mentioned earlier, Cambodia took advantage of the MFA and its quota free status. Exports rapidly grew and by 1998 the US had started to negotiate to bring Cambodia into the quota system. By 1999, quotas were imposed on 12 categories of garments produced in Cambodia, but with special allowances made for additional quotas subject to compliance with international labour standards. Conditions were monitored and verified by the ILO under the Better Factories Cambodia programme.

Under the agreement, the US promised Cambodia better access to its markets in exchange for SMES and garment producers complying with improved working conditions in their sector. The ILO was invited to monitor progress and, to do so, established the Better Factories Cambodia programme in 2001. In addition to monitoring standards, the programme also sought to actively meet and improve conditions through providing training and capacity-building programmes, as well as advice and market information to SME managers and workers as appropriate.

Box 7: Standards required of clothing and textile exporters

A. Consumer Health and Safety Management

The OHSAS 18000 is an international occupational health and safety management system specification to promote various improvements in the working environment. It helps to minimise risk to employees, improve an existing similar system, demonstrate diligence and gain assurance.

B. Product Quality Management

- European standard EN 14682:2007 is to be used as the reference standard for children's clothing with cords and drawstrings sold on the EU market.
- WRAP (Worldwide Responsible Apparel Production) compliance standard in the United States for the apparel industry. It endorses the certification of lawful, humane and ethical manufacturing of apparel throughout the world.
- The OE 100 certification from Organic Exchange is a set of industry compliance standards for the global organic cotton textile industry.
- GOTS (Global Organic Textile Standard) certification for organic textile authenticity standards that covers the production, processing, manufacturing, packaging, labelling, export, import and distribution of all natural fibres.
- The ISO 9001 certification is stipulated by the International Organization for Standardization.

C. Environmental Management

- LEED Certification—Leadership in Energy and Environmental Design.
- Green Building Rating System of the US Green Building Council.

D. Social Accountability and Fair Trade Management

- SA 8000 Social Accountability standards established by New York based Social Accountability International.
- Fair Trade certification from the Institute for Marketecology (IMO) of Switzerland.
- The ISO 9001 certification is part of a family that covers environmental management standards developed by the International Organization for Standardization.

E. Special Requirements of Buyers (Optional)

- Restrictions on the use of certain flame retardants.
- The regulation prohibits the use of the following substances in textile articles intended to come into contact with human skin: Tris (2,3-dibromopropyl) phosphat; Tris-aziridinyl phosphine oxide (TEPA); polybromobiphenyles (PBB).

Source: Compiled by Export Development Board, Sri Lanka (EDB-SL 2012).

Through the special quota arrangement with the US and the AfT given in support of labour standards through the ILO Better Factories programme, the garment sector has grown, providing minimum wages and conditions for its workers. The growth in numbers of women garment workers has also had spillover effects on the rural sector and the wider economy.

Early 2005 saw the end of the global textile quota system and Cambodia's preferential entry to the US market. In response, the US introduced new measures in the form of the Tariff Relief Assistance for a Development Economy (TRADE) bill. It aimed to grant Cambodia and 14 other developing countries duty-free accesses to the US markets. However, in part due to protectionist sentiments in the US, the bill has so far failed to pass through the US Senate.

Nevertheless, since 2005 and the end of the global textile quota system, the Cambodia garment sector has continued to benefit from being part of the international programme of improving working conditions. The Cambodia garment sector has continued to grow and provide jobs that help to improve the livelihoods of workers and their families. In 2015, it employed more than 650,000 workers and accounted for US$6.28 billion and 80 percent of Cambodia's total export revenue. AfT funding and programmes can take at least some of the credit for the achievement of the sector's ongoing viability.

Impact on the SDGs

Women in the industry typically remit back to their rural subsistence families between US$20 and US$40 per month. These remittances support on average four to nine family members in the village (Better Factories Cambodia 2007). Remittances are used both for consumption and investment purposes. Remittances supplement subsistence farming and allow families to purchase consumer goods otherwise not available to them. But the money is also used to invest in children's education, buying fertiliser or livestock, renovating homes and digging wells. Thus, the garment sector supports directly and indirectly more than a million people (Bargawi 2005). It can be concluded then that AfT in this case has clearly contributed to SDG 1 on no poverty; SDGs 3 and 4 concerning health and education; SDG 5 on gender equality; SDG 6 on clean water and sanitation; SDG 8 on good jobs; and SDG 12 on responsible consumption.

If this case study highlights the role and impact of AfT on labour standards, there are also similar examples of AfT impacts on environmental standards. The role of the German-funded AfT in this regard is highlighted in Box 8. The policy implications of these manufacturing studies and examples will be elaborated in section 5.

4.4. Services Trade and Sustainability Standards

The potential for low income economies and low income households to gain from services trade and investment liberalisation is well documented, particularly when productive foreign investment creates jobs, transfers technology and opens up traditional service monopolies to competitive gains.

Services play a critical role for firms' competitiveness, including as inputs into global and regional value chains. While in the past their impact on growth, employment, production and value added seemed to be confined to developed countries, the increasing fragmentation of production and the participation of developing countries in global value chains suggest that their recent development is key also for developing and emerging countries (Jansen 2015).

The research also tells us that in order for developing countries to benefit from services trade, they need accompanying conditions in place, including prudential regulation and controls to ensure that domestic policy measures are implemented such as fair competition policy measures and a transparent investment regime.

For SMEs to benefit from services and investment liberalisation also requires certain conditions such as their ability to compete with foreign service providers by complying with and maintaining relevant services

Box 8: Promoting environmental standards in industry

The Bangladesh government has set itself a target of increasing textile exports to US$50 billion by 2021. However, this must not be done at the expense of social and environmental standards, a recognition that is gradually gaining ground after the disasters at the Tazreen factory in 2012 and the Rana Plaza complex in 2013. Although there are already statutory provisions on compliance with social and environmental standards, by no means all establishments are willing or able to implement these.

To change this, state actors require knowhow, as well as staff and equipment to enforce their laws. Knowledge about social and environmental standards must be disseminated in the factories and tanneries, and qualified staff must be trained. Just as important is the role of international buyers and fair buying practices.

The German Minister for Economic Cooperation and Development, along with the German Society of International Cooperation (GIZ), have been carrying out a project to promote social and environmental standards in the industry since 2010. In one field of action, for example, state labour inspectors are being trained jointly with the ILO. Through the major business associations in the clothing industry, the project experts are also working directly with factory managements to improve social and environmental standards. Inclusion of people with disabilities is being encouraged in another field of action through a specially established job centre.

The project has already achieved concrete results. Over 870 factories have demonstrably improved compliance with national labour laws and international standards. *Over 230 factories have also improved their environmental management*. More than 500 middle managers have been trained in implementing social standards in a six-month diploma course. In addition, 250 labour inspectors have been trained and over 2,800 inspections carried out. Almost 150 factories have implemented measures to integrate people with disabilities—for example, barrier-free access to buildings.

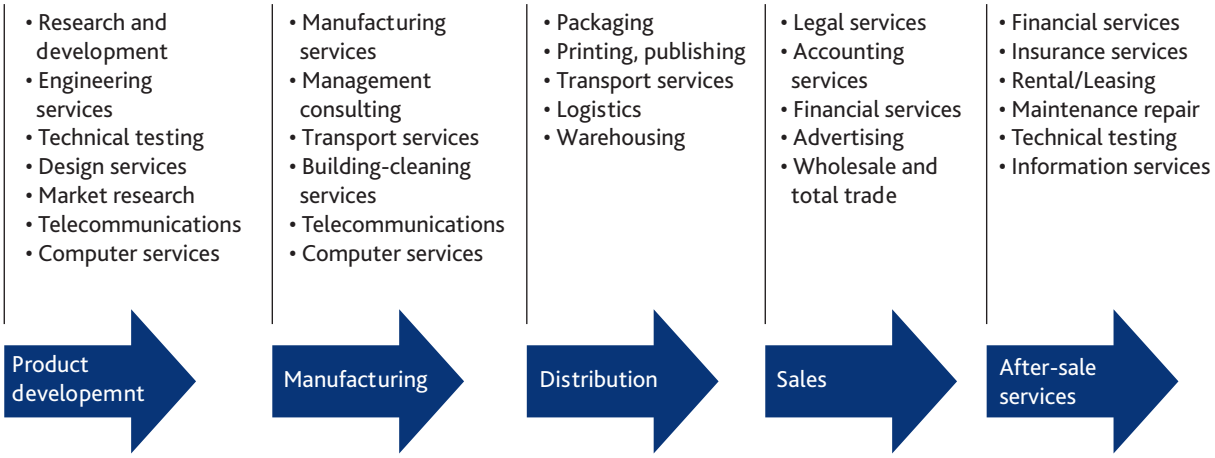
Source: Extracted from German Federal Ministry for Economic Cooperation and Development (BMZ) (2017), by permission.

standards, whether in the telecommunications sector, tourism, defence, education or business services and so on. Fortunately the information technology revolution is enabling SMEs in developing countries to be part of globally integrated services firms. Call centres in India or the Philippines provide a clear example of how subsidiaries of multinational companies, local firms and SMEs in developing countries can integrate and feed off global supply chains.

As Figure 11 shows, services now are an integral part of most GVCs, and SMEs globally have the opportunity to supply into any stage if they have the expertise and capacity to compete and meet the required sustainability standards. Multinational companies now typically source not just component parts but component services, including, for example, packaging, design, information technology or warehousing services, from various sources around the global economy.

The importance therefore of ensuring SMEs in developing countries have the capacity to compete for services contracts globally by complying with the various standards is extremely important if trade in services is to be inclusive and provide multiplier flow-on effects for low income communities—and AfT can play a key role in this endeavour where no other support is available for SMEs. A study on ASEAN business services provides a case in point.

Figure 11: Services along the global value chain



Source: WTO Secretariat

4.4.1 ASEAN agriculture development and regional diagnostic services

The challenge of sustainability standards

Plant health and the identification of pests is a trade policy issue, as well as a socio-economic issue. Knowledge of the health status of a country's agricultural and forestry industries has important implications for trade flows and people's livelihood.

The role of setting international standards for phytosanitary measures, including pest identification, is the responsibility of the UN Food and Agriculture Organization. Under its guidance, the International Plant Protection Convention has been developed, which consists of a series of standards, guidelines, principles and frameworks for countries to follow (FAO 2011).

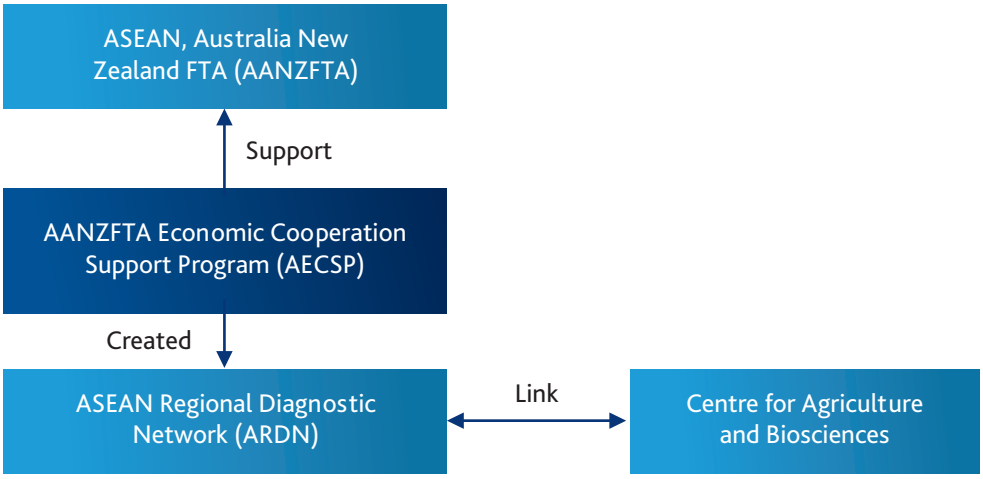
In ASEAN countries, there is a shortage of in-country taxonomic expertise services to identify plant pests and diseases. This shortage in services is often compounded by difficulties in accessing taxonomic expertise from outside the region. For SMEs and small producers this often meant an inability to comply with the export standards required and so they were excluded from key markets in the region.

The role of AfT

Following the ASEAN, Australia, New Zealand Free Trade Agreement (AANZFTA), the Economic Cooperation Support Programme (AECSP) was established in 2010 to support its implementation. As part of the AfT work programme, the ASEAN Regional Diagnostic Network (ARDN) project was launched in 2010. It is a multi-year project aimed at enhancing the capacity of ASEAN member states to comply with sustainability standards; certify plant pests and diseases; promote regional networking; and support the adoption of new diagnostic techniques. ARDN provides training workshops, in-country mentoring activities, mentored field surveys, and procurement of imaging equipment and high-resolution microscopy equipment. It has also facilitated the use of the Centre for Agriculture and Biosciences (CABI), based in Malaysia, as a clearing house for the network (see Figure 12).

The ASEAN Regional Diagnostic Network was set up to offer a one-stop centre that provides plant health and safety services, ranging from offering diagnostic tools to taxonomic expertise support. Making full use of advances in technology and the internet, ARDN brings taxonomic expertise from more advanced nations to developing countries to help them

Figure 12: Organisational relationships in delivery of ASEAN taxonomic services



Source: Author

comply with sustainability standards, including the ability to expedite the identification of new pests and diseases and to support pest management decision-making, as well as the development of reliable plant health status information for market access.

While remote microscopy is a valuable tool to aid in identification and diagnosis, the network's broader aim is to create a community of plant health stakeholders to share information and exchange knowledge. To achieve this and to provide a platform for experts to communicate with one another, an ARDN website was set up. The website offers a forum to host discussions between stakeholders, a taxonomic skill and expertise register listing technical expertise and resources, agricultural trade and market related information, links to sites related to plant health, live remote microscopy sessions and clearing-house protocols, and submission forms and guidelines for meeting various standards and requirements such as SPS.

Impact on SDGs

The networked services of ARDN have improved the capacity of government, customs and quarantine officials as well as SME exporters to identify pests and disease and manage their relationship with business and government departments in other countries. A recent review of the AfT programme undertaken by the Australian government found that a common benefit identified was the ability to network with other ASEAN members (Australian Government 2016). Networking occurs through CABI's regional centre in Malaysia which acts as the clearing house for ARDN information requests. While this network generally was seen to work well, there were instances of it not generating any response to an inquiry, reflecting the voluntary nature of the network.

The review found that in Cambodia and Laos, ARDN services had improved the capacity of government and producers to deal with pest and plant disease, with significant impact on agriculture production and the countries' ability to trade and improve SME producers and household income. Three-quarters of the population in Cambodia remain tied to agriculture, and pest identification and the ability to prevent significant loss to trade have a direct effect on the income of smallholder contract farmers.

In Laos, ARDN helped the plant quarantine and regulatory divisions identify a pest outbreak in cassava exports to Thailand, Cambodia and Vietnam. Cassava is the country's third largest agriculture crop. The ARDN training also helped with market access for corn to China and Thailand.

Overall ARDN networked services have impacted directly on several SDGs, including SDG 1 on poverty reduction, 9 on industry, innovation and infrastructure, 12 on responsible

consumption and production, and 16 on peace and justice, strong institutions.

More can be achieved in the future as the network develops. It is still reliant on AfT funding to some extent and in the future will need to embedded in financially sustainable practices while ensuring that paid staff coordinate and complement voluntary support work. However, the good news is that STDF and the Australian government are set to launch a new project to December 2019, building on the ARDN project, which will see the development of further innovative information technology tools to track data on pests.

Overall the case study strongly demonstrates how AfT provides both direct and indirect support for SMEs to gain training and access services in order to meet, in this case, plant health and disease prevention requirements. In Box 9 there is a similar story but with a very different type of service—tourism and hospitality services.

As a result of the improved wharfs and amenities in the remote islands of Vanuatu there was increased capacity for tourism providers. Through training, companies undertook and met international marketing and standards requirements and benefited from the increased supply of international tourists into remote areas. The significant flow-on benefits for local communities were in accommodation, supply of food for restaurants, markets for handicrafts, transportation and employment, with clear implications for progress on the SDGs.

4.5. Summary

The case studies described indicate the significant role AfT can and does play in assisting developing country firms to meet sustainability standards in the provision of services that allow them to integrate into GVCs. They highlight the importance of utilising quality infrastructure, technology transfer and information services to improve awareness of standards and outreach to SMEs, which then become included in GVCs. They also point to the considerable impact AfT can have on progress towards the Sustainable Development Goals. Those SDGs most likely to be impacted by AfT interventions are summarised in Table 5.

Table 5: SDGs most commonly impacted by AfT interventions

SDG 1	No poverty
SDG 2	No hunger
SDG 5	Gender equality
SDG 8	Good jobs and economic growth
SDG 9	Innovation and infrastructure
SDG 10	Reduced inequalities
SDG 12	Responsible consumption
SDG 17	Partnerships for the goals

Source: ILO (2015)

Whether in food exports, fisheries, light manufacturing or in services, there is clear evidence of the effective role AfT can play in supporting SMEs in developing countries in complying with the necessary sustainability and GVC requirements. In most cases, there was an absence of a lead firm, or a commercial or government intervention that was going to meet the specific needs of the SMEs concerned. At the same time, if AfT to SMEs can leverage off any other available support, however modest, that a government or lead firm can or might be willing to offer, then all the better. The leveraging and combining of resources is to be encouraged and is discussed further in the next section on policy implications.

Box 9: Complying with tourism standards

Carnival Cruise Ships—Tourist Services and Vanuatu

Carnival Australia is a cruise company which carries over 150,000 passengers to the Pacific Islands each year. In remote areas of Vanuatu, local accommodation suppliers, hospitality services and the financial management services which support them were lacking the skills and infrastructure to meet sustainability requirements that Carnival Australia obliged them to meet if its cruises were to stop over and consume the various tourist services on offer.

A relatively small but important AfT grant of A$805,000 from the Australian aid programme supported:

1. Upgrading of facilities on three remote islands in Vanuatu, including the expansion of accommodation, jetties, amenities blocks and barbeque facilities.
2. Training of local traders in sustainability planning, hospitality standards and financial management.

Some of the sustainability standards that local hotel and accommodation suppliers need to meet, apart from usual health and hygiene standards, come under the Global Sustainable Tourism Council (GSTC) Criteria for Hotels and Tour Operators and include, for example, compliance by businesses with:

- effective sustainability planning;
- maximising social and economic benefits for the local community;
- enhancing cultural heritage; and
- reducing negative impacts to the environment.

The Council either "approves" or "recognises" certification schemes by these standards. Approval means that the criteria, processes and procedures meet the GSTC and other international standards of competency, in this case as applied to two global and one regional certification scheme, including Earth Check Company Standard, Biosphere Responsible Tourism and Ecotourism Australia.

As a result of the AfT training and infrastructure development programme, the following was achieved:

- increased cruise ship calls to the islands;
- increased incomes for over 300 community members through more tourism, improved merchandise offers and provision of tours;
- access to services from the increased visits (e.g. medical);
- installation by a telecommunications company of a mobile phone tower on one of the islands; and
- additional funding secured from New Zealand Aid to support ongoing community development.

Source: Coffey International Development (2013); Global Sustainable Tourism Council.

Overall, the various case studies provide some clear lessons and implications for policymakers, given that the supply of AfT is limited. The following section summarises these lessons and the implications for AfT policy and suggests what might be the most useful AfT priorities for the future.

5. POLICY IMPLICATIONS AND RECOMMENDATIONS

This section summarises in three parts how AfT might best be tailored to assist SMEs and developing country firms to comply with the range of sustainability standards required for GVC integration.

- First, by examining policy implications on a sectoral basis. This arises from the earlier discussions of SME needs and the lessons of the case studies and examples given in section 4.

- Second, by extracting several cross-cutting themes relevant to the current global trade environment in which AfT is resourced and delivered.

- Third, by identifying overarching or global recommendations for consideration in the future in AfT policymaking and in relation to the SDGs.

5.1 Policy Implications from Sectoral Studies

5.1.1 Policy implications for the food and agricultural sector

The lessons observed in the food and agricultural sector in terms of policy considerations for AfT programmes to assist in sustainability standards compliance can be summarised as follows.

Quality infrastructure and ongoing maintenance. The important role of AfT in the provision of quality infrastructure and appropriate capital equipment is highlighted in various studies, whether in the provision of capital equipment such as steel tables, dryers or fumigation chambers or in support of standards setting institutions to help with compliance. The evidence clearly points to AfT being effectively utilised when it provides appropriate infrastructure for local use, able to be managed and well serviced locally. This usually entails an appropriate training strategy to be in place to ensure the infrastructure can be serviced using local staff and the latest technology available to local suppliers. The case studies also discussed the importance of how locally based quality infrastructure, such as through the provision of laboratories and institutions able to provide accreditation and certification, can greatly assist SMEs to meet compliance.

Training, capacity building and gender. Studies point to the importance of AfT playing a focused capacity-building role for both management and employees in the various production processes and requirements to meet food safety and health standards in order to comply with, for example, HACCP, SPS and other sustainability demands. In the case of mango production in Burkina Faso, women workers were used to the traditional method of drying mangoes. Changing the process for drying mangos required the women to acquire new skills and use new technology. Women-owned SMEs are often at the lower ends of the GVC pyramid, and so a particular focus should be on the upscaling of small businesses owned by women in agricultural supply chains. The emphasis should be on supporting them to meet standards that help increase exports while contributing to gender equity and more even development.

Local ownership and self-sufficiency. AfT case studies in the agricultural sector demonstrated the importance of local ownership to ensure that the compliance project aligns with national interest. Donor goals and objectives should include capacity building and training of government officials on relevant agricultural trade and standards policy regulations, as well as advice on how best to maintain export pathways along the supply chain, as clearly shown in the Tongan case study.

Multi-donor coordination. The case studies in agriculture reinforced the importance not only of alignment between donor and recipient but of coordination and cooperation between several different donors, whether multilateral, regional or bilateral. This also has a flow-on effect for policy coherence in aid, trade and

national development policies on agriculture and trade.

Leveraging trade agreements. The Tonga study also showed that it is important to leverage trade negotiations and agreements. Australia, New Zealand and Pacific Island countries have recently finalised a trade and economic cooperation agreement (PACER Plus) and this, in part, motivated both Australia and New Zealand to examine opportunities to support Pacific Islands in engaging in and benefiting from more integrated and open trading systems through AfT.

5.1.2 Policy implications for the fisheries sector

Simplify supply chain processes. Often the fisheries supply chain is long and complex, with many processes in place that can be affected by non-compliance with necessary food safety or health standards. Therefore, wherever possible, AfT should focus on shortening or simplifying unnecessarily complex supply chains in this sector.

Donor coordination and local ownership. The European Union, NORAD and the government of Bangladesh implemented the AfT programme in Bangladesh jointly with UNIDO in cooperation with the Department of Fisheries in Bangladesh. From examination of evaluation reports, this programme reflects the value of closer cooperation between a range of major donors in line with the domestic objectives of the government of Bangladesh. The policy implication points to the importance of local ownership and donor coordination.

Institutional capacity building. In Bangladesh, AfT improved the overall regulatory system with training for fishery officers at home and abroad, as well as training government and industry inspectors and extensions officials on HACCP inspection, water quality, good aquacultural practices and traceability issues, pointing to the importance of institutional capacity building.

Gender and labour law. Women work in a number of different areas in the production process of fishery supply chains, and it is important that gender-focused training be delivered, for example, on labour law and rights for female workers in processing factories while upgrading the skills of women workers in the supply chain.

Community outreach and training. If AfT support for standards compliance is to assist in inclusive development, then outreach programmes are an important addition of value. In the Bangladesh case study, the AfT programme implemented a literacy programme, while developing coordination and partnership building with local NGOs, civil society and business associations not only to create awareness but to create future employment opportunities for those outside the existing supply chain.

5.1.3 Policy implications for the light manufacturing sector

Donor coordination and partnership. The importance of donor coordination in AfT programmes was also reinforced in the manufacturing sector, as exemplified by the study on pottery producers in Nepal where the German donor worked closely, not only with other donors, but also with the local Nepalese provincial government, a local standards organisation and NGOs such as Oxfam. The Better Factories Cambodia programme highlighted close collaboration between the ILO and the International Finance Corporation, a member of the World Bank Group.

Appropriate infrastructure and maintenance. Whether it is kilns, flywheels or appropriate safety equipment, the provision of capital equipment, fit for purpose, is essential so that locals can be trained to use and fully service it. The provision of specialised equipment and training on how to use it were the key factors in the success of the CPPN AfT intervention in Nepal.

Training for standards organisations. Studies across this sector reinforced the importance of AfT programmes reaching out to train national and local standards organisations. The flow-on

result of a "train the trainer" style programme has the multiplier effect of not only assisting the organisational capacity of the local standards organisation, but allowing them to pass on training and support for standards compliance to SMEs and workers in the light manufacturing supply chain.

Labour standards and gender. The textile and clothing sector in particular is prone to exploitation of cheap labour, and especially female labour. The Better Factories programme has been in place in a number of countries, including Cambodia, and can be seen to be an effective use of AfT funds in support of higher labour standard compliance.

Environmental standards. AfT can also be used effectively to assist SMEs to meet environmental standards. Following the Tazreen fire disaster in Bangladesh, over 230 factories were trained to improve their environmental and safety standards management. More than 500 middle managers were trained in a six-month diploma course in environmental and social standards.

Inclusion of people with disabilities. Given the nature of light manufacturing, it is a sector particularly able to cater for people with disabilities. The German AfT case study included training programmes and a job centre in the textile and clothing sector which specifically included people with disabilities. Almost 150 factories in Bangladesh now have implemented measures to integrate people with disabilities—for example, SMEs and local factory owners have increasingly started to modify buildings to include barrier-free access.

Leveraging trade agreements. The Cambodia garment sector is a good example of how the US-Cambodia trade agreement helped the Better Factories programme leverage AfT support to improve labour standards.

Importance of market access. Last but not least, a very important policy implication derived from studies in the light manufacturing sector is the importance of providing market access to reinforce longer-term AfT sustainable solutions. For example, while the Better Factories programme assisted SMEs and workers across the value chain to meet required labour standards, this is of little use so long as market access is denied through protectionist policies. The support of the United States Agency for International Development (USAID) for the Better Factories programme was eventually undermined by the US Senate failing to pass a bill allowing duty free access for clothing and textile imports from LDCs, despite having granted this under the global textile quote system.

5.1.4 Policy implications for services and standards

Technology and SME access to GVCs. An important aspect of the AfT interventions in services trade was the use of technology. For example, the internet and functions such as Skype were used to bring local, regional and international expertise together to impart necessary knowledge and skills in support of sustainable standards compliance. AfT, using ongoing technological advancements, can be tailored for SMEs to create ease of access to global value chains through standards compliance.

Regional advantage. The ASEAN case study of pest identification demonstrates the role of AfT in helping to achieve economies of scale through use of regional institutions—in this case, the establishment of a centre of expertise based in Malaysia but networked throughout the region, capable of harnessing local as well as international knowledge in assisting producers to meet standards compliance.

Vital role of the private sector. The contribution and additional investment by the private sector has been demonstrated in a number of AfT interventions. With appropriate support, the private sector can play a pivotal role in implementing sustainability compliance strategies and alleviating poverty.

Leveraging trade agreements. As with the trade in goods sectors, AfT in support of standards compliance for SMEs can be leveraged off trade agreements. For example,

the ASEAN, Australia, New Zealand FTA was used as leverage for AfT support for standards compliance as part of the agreement's implementation programme.

Infrastructure, maintenance and financial sustainability. Case studies from the services sector reinforce the value of appropriate infrastructure (e.g. in information technology) and the need to embed training into the AfT programmes to ensure the processing and maintenance of the infrastructure. The ASEAN services programme raised the issue of financial sustainability. Once the AfT funding intervention is completed, there needs to be sufficient local ownership of the overall aims of the programme to continue funding training and support for upgrading infrastructure and maintenance support services.

Direct training of SMEs, specifically for sustainability standards in services. Through targeted training in this sector, it was shown that SMEs could meet international marketing and sustainability standards requirements. The significant flow-on benefits for local communities in accommodation services, supply of food for restaurants, and markets for handicrafts have clear implications for progress on the SDGs.

From this summary of lessons learned, it is clear that the policy implications and lessons for the effective use of AfT in standards compliance across the sectors discussed have considerable overlap and therefore point to a number of cross-cutting thematic policy considerations. Combined with other research and consultations, the thematic policy considerations are summarised in the next section.

5.2 Cross-Cutting Policy Implications

The following policy implications and recommendations, unless otherwise stated, are generally directed at building the capacity of SMEs and small producers. As established from the outset, they are the most vulnerable to exclusion from GVCs, given the costs and other factors raised in section 2 of this paper.

Training, technical advice and capacity building

- *AfT interventions should tailor training and capacity building as follows:*

  target developing country SMEs to be able to comply with sustainability standards;

  target the training capacity role of international standards organisations such as ISO, WFTO, STDF and ISEAL Alliance, along with national and local standards organisations, to harness existing expertise in reaching the needs of SMEs;

  consider extending the role of STDF to assist SMEs in compliance with TBT and other related sustainability standards in addition to SPS; and

  target the technical skills of workers, both those currently inside the value chain and those outside the GVC in the local community, with a particular focus on young people.

As mentioned in earlier discussions, a training programme for SMEs in the Indian Ocean Rim region, held in Mauritius, specifically targeted compliance as part of an intensive trade training programme and used local as well as international expertise, with effective results.

Studies across this sector reinforced the importance of AfT programmes reaching out to train international (WFTO, ISO, ISEAL Alliance, STDF) as well as national and local standards organisations such as Sana Hastakala in Nepal. As section 2 demonstrated, international standards bodies already have a mandate to assist with compliance but often find it difficult to reach directly into the training of developing country SMEs. Therefore, the flow-on effect of a "train the trainer" style programme has a multiplier effect of not only assisting the organisational capacity of the local standards organisation, but also allowing them to pass on training and support for standards compliance to SMEs and workers.

Given the role STDF plays in facilitating safer trade through support for SPS compliance, it may be useful to consider an expanded role in support of TBT and broader sustainability standards compliance. STDF already has a mandate to improve transparency and streamline SPS procedures along particular value chains of importance to SME trade, so extending that capacity to other areas of sustainability support could be an effective use of limited multilateral resources.

AfT interventions also need to try to target not only the skills of SME managers and workers within GVCs to help them maintain and upgrade their ability to meet sustainability standards, but where resourcing allows, extend training in numeracy, literacy and the technical skills required for compliance to young unemployed and others outside current GVCs. Here it is important for AfT programmes to endeavour to leverage off existing government training modalities and also harness industry associations and larger firms in the private sector to assist in training programmes for supply chain integration for the local community.

Quality infrastructure, appropriate infrastructure and maintenance

- *AfT should focus on a two-pronged approach to quality infrastructure: supplying quality infrastructure institutions locally that assist with standards setting and compliance, while also seeking to ensure this infrastructure is serviced and maintained by trained SME staff and/or by local service providers.*

Aid for Trade should target locally based quality infrastructure, for instance through the provision of laboratories and institutions able to provide accreditation and certification, in order to assist SMEs to meet compliance.

AfT should also continue to focus on infrastructure, both quality infrastructure and capital equipment, that is appropriate for local conditions and able to be utilised, repaired and serviced by trained SME staff or by trained local service providers. Every sector examined in this paper underlined the value of appropriate capital equipment or quality infrastructure and the need to embed infrastructure-related training into the AfT programmes to ensure the efficient use and ongoing maintenance/upgrading of the infrastructure in line with compliance with sustainability standards. Implied here is the use of AfT wherever possible to transfer up-to-date technology with the appropriate training and servicing provision.

Services focus

- *AfT should increase its focus on assisting SMEs involved in trade in services.*

Given the potential for SMEs, low income economies and low income households to gain from services trade, combined with new innovations and opportunities opening up for developing country SMEs to more easily access service value chains, it would seem logical to increase the focus of AfT programmes on assisting SMEs in the service sector to comply with sustainability standards. This includes the key sectors of tourism, information and communications technology and business services, as well as education and health. AfT support for better analysis of value chains from the outset would also be useful in assisting SMEs to recognise opportunities.

Gender and marginalised groups

- *To enhance inclusive compliance with sustainability standards, all AfT programmes should include a gender analysis, as well as a poverty analysis in support of SME compliance with sustainability standards.*

AfT interventions should mainstream gender to ensure women managing or working for SMEs in developing countries can be aware of and understand sustainability standards and know how to meet the various requirements for the industry in which they do business. Information sharing, capacity building and targeting AfT programmes in areas where women are concentrated and/or face particular challenges, such as in textiles and clothing,

can be particularly effective. Poverty analysis of value chains where AfT intervention are planned can incorporate marginalised groups, including young unemployed, indigenous groups, people with disabilities and/or other sections of the community.

The World Bank, supported by various donors including from Australia and the United Kingdom, is currently undertaking a major infrastructure development programme across South Asia, called the South Asia Regional Trade Facilitation Program.[6] It is employing a gender-sensitive approach across all activities to ensure local SMEs involving women and marginalised groups are consulted with and benefit from infrastructure development and associated cross-border trade reforms. It is early days in the implementation of this programme but it may well provide useful lessons for the future in effective Aid for Trade processes for ensuring the integration of women's SMEs into GVCs through a mix of gender-sensitive trade infrastructure and trade facilitation reforms while building their capacity to meet customs and sustainability standards compliance.

Local ownership and financial sustainability

- *AfT programmes need to ensure they are consistent with local and national economic development objectives. This should include embedding programmes for SME compliance with sustainability standards in the recipient country's national objectives in order to improve the opportunity for financing the programme once the initial AfT donor funding intervention is completed.*

The AfT case studies in the agricultural sector demonstrated the importance of local ownership to ensure that the compliance project aligns with national interest. Donor goals and objectives should include capacity building and training of government officials on relevant trade and standards policy regulations, as well as advice on how best to assist the private sector maintain export pathways along the supply chain.

The EIF programme also highlights how important it is for LDCs to prioritise compliance with standards. The EIF practice is instructive in that it lays out a clear process whereby, if a member country identifies private sector compliance with sustainability standards and other NTBs as a priority issue in their national development objectives and through their Diagnostic Trade Integration Study, then this should become a priority for the AfT donor community.

Local ownership, which lies at the core of EIF's approach, also helps embed ongoing financing and support for the programme once AfT funds are exhausted. This ensures, for example, that institutions continue to function effectively[7] and that infrastructure continues to be serviced or upgraded or that the ongoing training of SME workers in meeting sustainability standards requirements is delivered. If regional support can also be harnessed, for example through a regional bank, such as the African Development Bank, or a regional association like ASEAN, then there is a further incentive for countries to combine resources to tackle issues around trade facilitation and cross-border trade, as well as standards compliance.

Market access analysis

- *There needs to be a sound political economy analysis from the outset to try to ensure that capacity building of SMEs will lead to improved market access into the economies of existing or potential trading partners.*

The case study in which the US closed off market access when the Senate rejected a bill for duty free access for LDCs in the textile and clothing sector illustrates the importance of

6 For more information on this program see the following website: http://www.partnershipforsouthasia.org/thematic-window/south-asia-regional-trade-facilitation-program

7 Recognizing the need to ensure sustainability of institutional support, the EIF has recently instigated a two-year "sustainability support" project to allow countries to integrate EIF-supported institutional structure into the structure of their respective trade ministries to assist in the smooth transition of the institutional migration process.

sound political economy analysis. While it is not always easy to accurately forecast the future behaviour of governments, or markets for that matter, sound political economy analysis from the outset of the AfT programme design can go some way to identifying opportunities and risk. This should help prevent significant sums of money spent on capacity building or infrastructure in support of standards compliance from being wasted when key markets are either limited or closed off.

In the ASEAN case-study for example, given that members are committed to a long-term regional trade and economic cooperation agreement, it is reasonable to expect that they are also committed to increasing trade and market openings for other members. It is unlikely, for example, that Australia would reverse its WTO and ASEAN commitment to duty free access from LDCs such as Laos and Cambodia. An AfT intervention in assisting those countries and their private sectors to comply with sustainability standards should, ceteris paribus, lead to increased market access opportunities into the Australian market.

South-South market access opportunities and developing country donors

- *AfT programmes can assist directly with South-South GVC integration and standards compliance. New donors, as well as existing donors of AfT, should be encouraged to support initiatives in this area.*

When developing countries or LDCs trade directly with other southern markets, often sustainability standards are lower, less regulated or in some cases non-existent. This can incentivise some SMEs to target South–South markets that require less strict compliance standards. Governments in low and middle income economies may also seek to promote new and deepened trade exchanges with economies with similar income and consumer profiles (Morris and Kaplinsky 2017).

While sustainability standards may be lower or less regulated in such markets, from the sectoral case studies and evidence to date it would seem that SMEs are still having to reach a higher level of sustainability standards conformity than would otherwise be the case, for example in meeting basic food safety and SPS requirements. This should then act as a "stepping stone" towards meeting higher sustainability standards in the interest of developing country consumers and the wider society.

If further research shows this to be the case across sectors, then it is important that AfT is also used to assist SMEs in developing countries to comply with standards that assist them in South–South as well as in North–South value chains. This may be a relatively new but important area for developing country donors to consider, given the significant funds being disbursed by those listed in Table 6.

Leveraging from trade agreements

- *Wherever possible, AfT programmes in support of SME standards compliance should be leveraged from existing or future trade agreements, whether multilateral (the WTO Trade Facilitation Agreement), regional or bilateral.*

Examples from AANZFTA, PACER Plus and the Cambodia–US trade agreements illustrated how AfT interventions were either leveraged from or supported by the relevant agreements. This can occur through increased market access for standards-compliant firms or through direct funding support for capacity building.

The WTO's Trade Facilitation Agreement is a useful example of where potential opportunities lie, given the strong international commitment to the agreement and strong support from donor countries for capacity building to assist developing countries overcome supply-side barriers to cross-border trade and deal with NTBs that impede the efficient flow of goods and services. Compliance with sustainability standards fits in well with the aims of the TFA and should be considered as a useful source of support.

Table 6: Estimates of development cooperation flows from bilateral donors that do not report to the OECD-DAC official Overseas Development Aid flows

Country	2010	2011	2012	2013	Source
Brazil	500	..	..	..	Institute of Applied Economic Research (IPEA) and Brazilian Cooperation Agency (ABC)
Chile	16	24	38	44	Ministry of Finance
China	2,561	2,776	3,114	3,009	Fiscal Yearbook, Ministry of Finance
Colombia	15	22	86	95	Strategic institutional plan 2013, Presidential Agency of International Cooperation
India	709	788	1,076	1,257	Annual Reports, Ministry of Foreign Affairs
Indonesia	10	17	27	12	Ministry of National Development Planning
Mexico	..	99	203	..	Mexican Agency for International Development Cooperation (AMEXCID)
Qatar	334	733	543	1,344	Foreign Aid reports, Ministry of Foreign Affairs
South Africa	151	227	188	183	Estimates of Public Expenditures 2013, National Treasury

Source: OECD/WTO (2015), values in gross US dollars millions.

As noted in section 2 (needs of SMEs) the most recent Aid for Trade at a Glance report highlights the fact that a priority for SMEs, and in particular micro SMEs, is the need for action to streamline customs procedures for these firms. The report notes that the coming into force of the WTO Trade Facilitation Agreement should help to address many of these concerns:

> The TFA is a powerful tool to reduce trade costs. Trade facilitation tops the AfT priorities of both developing countries and their development partners, albeit in a broader conception that also includes physical connectivity, such as transport corridors and digital connectivity too. There is also growing evidence of the positive impact of AfT in tackling bottlenecks and contributing to *inclusive trade outcomes*. (OECD/WTO 2017, emphasis added)

5.3 Global AfT Recommendations for Potential Impact on the Sustainable Development Goals

While some of the following policy implications and suggestions can also be derived from the sectoral analysis and various case studies in this paper, they relate more to broader, more global issues that are often raised by experts and policy analysts concerned with AfT policies and/or sustainability standards.

A. Increase focus of AfT resources for standards compliance across categories 1, 2 and 3

- *Consideration should be given to increasing allocations across AfT categories 1, 2 and 3—trade policy and regulation, trade-related infrastructure and productive capacity building—in support of sustainability standards compliance.*

Based on the OECD/WTO categories of AfT programmes, it is recommended that each of the three main categories of delivery, to build the capacity of government and the private sector in developing countries, along with trade-related infrastructure development, should actively prioritise resources for standards compliance support. This will require donor–recipient cooperation and, if implemented, would allow substantial resources to be allocated to more inclusive trade and sustainable development.

B. Donor coordination and policy coherence

- *AfT programmes need to incorporate close donor coordination and cooperation with*

sustainability standards organisations, recipient governments and industry associations both for policy coherence and ongoing programme sustainability.

The importance of close donor coordination can be seen in most of the successful AfT programmes discussed in this paper. Donor coordination is often a prerequisite for effectiveness—and this applies equally to AfT in support of standards compliance. The European Union, NORAD and the government of Bangladesh implemented the AfT programme in Bangladesh jointly with UNIDO in cooperation with the Bangladesh Department of Fisheries. To date this programme has been seen as a good example of support for standards compliance. It reflects the value of closer cooperation between a range of major donors in line with the domestic objectives of the local government concerned, as was crucial for local ownership and the ongoing sustainability of the AfT programme.

Moreover, it is important for AfT programmes to bring together key stakeholders in the development of and compliance with sustainability standards. AfT multilateral donors and suppliers, such as EIF, UNCTAD and ITC, already are aware of and work closely with some of the international standards organisations such as ISO, STDF and ISEAL Alliance.

Nevertheless, there is room for closer cooperation, for example with the WFTO or ILO, in order to encourage the sharing and leveraging of resources in support of AfT targeted at sustainability standards compliance. This cooperation at a multilateral level should be reflected at the regional and local levels as well, where the participation of regional institutions, local industry bodies, relevant NGOs and civil society organisations concerned with sustainability standards work together to combine and share resources wherever possible.

Also important for the effective impact of AfT programmes and policy coherence at all levels is institutional cooperation between donor and recipient governments. A key lesson from AfT programmes in support of the Millennium Development Goals is that sustained change cannot be achieved through one-dimensional or single-sector goals. The SDGs, with their broader focus, therefore require a response which incorporates multidimensionality into policy design. As Da Silva (2017) infers, a compartmentalised approach that has limited the effectiveness of both aid and trade policies needs to be replaced by collaboration and coherence in solving integrated problems.

C. Further research and analysis

- *Further research needs to focus on specific value chain analysis, not just of sectors, but of specific industries and businesses within sectors, so as to more accurately assess how and where exactly in specific value chain processes AfT is likely to be most effective in support of small-scale and informal sector women traders and in support generally of SME compliance with sustainability standards.*

Further research work could also include how AfT donors and suppliers, international and national sustainability standards organisations, sectoral industry associations, relevant NGOs and local civil society organisations can better combine and share resources in support of SME standards compliance, including the potential role of an expanded STDF or ISO in capacity building for SMEs. Research work on South–South market integration and the role of AfT in sustainability standards in these markets would also be very informative. In section 2, questions were also posed on the potential of lead firms, industry associations and local governments to do more in assisting SME compliance and further work on these issues would be equally valuable.

5.4 Conclusion

Overall the study shows that the ability of vulnerable developing country firms to comply with sustainability standards can be significantly enhanced by well-designed AfT programmes. The question is how to design AfT interventions to maximise effectiveness.

To this end, the research, consultations and case studies point to the importance of AfT programmes in support of vulnerable SMEs which are often unaware of or unable to afford compliance. Evidence suggests that while AfT programmes in support of compliance will differ across sectors to some degree, there are a number of cross-cutting areas in common. They include the importance of targeted training and capacity-building programmes for SMEs, the vital role of appropriate quality infrastructure and related servicing requirements, and a strong emphasis on gender and poverty analysis of value chains. They stress the importance of local ownership and market access, including through the leveraging of free trade agreements.

There is support for closer collaboration between AfT donors, sustainability standards organisations and the recipients (SMEs, industry bodes and local government), to ensure a more efficient leveraging and harmonisation of resources, policy coherence and local ownership—essential for the long-term sustainability of AfT programmes.

It is concluded that the judicious application of Aid for Trade interventions for sustainability standards compliance should be enhanced as an important source of support for more inclusive development and more even economic growth consistent with the Sustainable Development Goals.

REFERENCES AND BIBLIOGRAHPY

Arcuri, A. 2013. "The TBT Agreement and Private Standards." In *Research Handbook on the WTO and Technical Barriers to Trade*, edited by T. Epps and M. J. Trebilcock. Cheltenham: Edward Elgar.

Australian Government. 2016. "Gearing up for Trade: Australia's Support for Trade Facilitation Programs." http://dfat.gov.au/aid/how-we-measure-performance/ode/Documents/gearing-up-for-trade-report.PDF

Bamber, P., and C. Staritz. 2016. *The Gender Dimensions of Global Value Chains*. Geneva: International Centre for Trade and Sustainable Development (ICTSD).

Bangladesh Shrimp and Fish Foundation. 2016. "Shrimp Sector Stakeholders in Bangladesh Discuss about Importance of Product Certification." Workshop. http://shrimpfoundation.org/2016/12/24/shrimp-sector-stakeholders-in-bangladesh-discuss-about-importance-of-product-certification/

Bargawi, O. 2005. "Cambodia's Garment Industry—Origins and Future Prospects." *ESAU Working Paper* No. 13. London: Overseas Development Institute.

Barrientos, S. 2014. "Gender and Global Value Chains: Challenges of Economic and Social Upgrading in Agri-Food." *EUI Working Paper* No. RSCAS 2014/96. Florence: European University Institute.

Bessant, J., R. Kaplinsky, and R. Lamming. 2003. "Putting Supply Chain Learning into Practice." *International Journal of Operations and Production Management* 23 (2): 167–84.

BEST-BFQ (Better Work and Standards-Better Fisheries Quality). 2014. "Simplification of Shrimp Supply Chain: Stakeholder Discussion Meeting at Rampal." Dhaka.

BEST-BFQ (Better Work and Standards-Better Fisheries Quality). 2016. "Advances in Aquaculture Food Safety in Bangladesh." https://bfqbangladesh.wordpress.com/

Better Factories Cambodia. 2007. "18th Synthesis Report on Working Conditions in Cambodia's Garment Sector." Phnom Penh: Better Factories Cambodia (International Labour Organisation).

Busse, M., R. Hoekstra, and J. Königer. 2012. "The Impact of Aid for Trade Facilitation on the Costs of Trading." *Kyklos* (April). https://www.econstor.eu/bitstream/10419/48293/1/48_koeniger.pdf

Cali, M., and D. W. te Velde. 2011. "Does Aid for Trade Really Improve Trade Performance?" *World Development* 39 (5): 725–40.

Clean Clothes Campaign. 2015. "Cambodia Factsheet February 2015." https://cleanclothes.org/resources/publications/factsheets/cambodia-factsheet-february-2015.pdf

Coffey International Development. 2013. "Enterprise Challenge Fund for the Pacific and South-East Asia: Project Completion Report." Prepared for the Australian Agency for International Development. https://dfat.gov.au/about-us/publications/Documents/ecf-2013-project-completion-report.pdf

Da Silva, J. M. 2017. "How Can Aid for Trade Help Advance the Sustainable Development Goals?" *Bridges Africa* 6 (5).

Duke CGGC (Duke University Center on Globalization, Governance and Competitiveness). 2016. "Concept and Tools." https://globalvaluechains.org/concept-tools/

EDB-SL (Export Development Board, Sri Lanka). 2012. "Market Access Guidelines: European Union-Apparel Sector."

EIF (Enhanced Integrated Framework). 2015. "EIF: Trade for LDC Development Impact Report 2015."

European Commission. 2017. "Food Information to Consumers—Legislation." http://ec.europa.eu/food/safety/labelling_nutrition/labelling_legislation_en

FAO (Food and Agriculture Organization). 2011. "Adopted Standards (ISPMs)." Food and Agriculture Organization of the UN/International Plant Protection Convention. https://www.ippc.int/en/core-activities/standards-setting/ispms/

FAO. 2014. "Impact of International Voluntary Standards on Smallholder Market Participation in Developing Countries—A Review of the Literature." Rome: Food and Agriculture Organization.

Ferro, E., J. S. Wilson, and T. Otsuki. 2013. "The Effect of Product Standards on Agricultural Exports from Developing Countries." *World Bank Policy Research Working Paper* No. 6518. SSRN: https://ssrn.com/abstract=2287051

Fessehaie, J. 2016. *Regional Integration and High Potential Value Chains in West Africa*. Geneva: International Centre for Trade and Sustainable Development (ICTSD).

German Federal Ministry for Economic Cooperation and Development (BMZ). 2017. "Free and Fair Trade as a Driver for Development: The German Strategy for Aid for Trade." *BMZ Paper* 07. Bonn: German Federal Ministry for Economic Cooperation and Development (BMZ). https://www.bmz.de/en/publications/type_of_publication/strategies/Strategiepapier380_07_2017.pdf

German Federal Ministry of Economic Cooperation and Development (BMZ), World Bank Group, UNCTAD and ICTSD. 2017. "Clicks Need Bricks: Promoting Trade through Quality Infrastructure." Presented at the Global Aid for Trade Review, Geneva, 11 July.

Gobena, A. 2016. "Enhancing SPS Capacity to Promote Trade for Development in Least Developed Countries: A Review of Diagnostic Trade Integration Studies." Geneva: Standards and Trade Development Facility. http://www.enhancedif.org/en/system/files/uploads/eif_stdf_study.pdf

Higgins, K., and Prowse, S. 2010. "Trade, Growth and Poverty: Making Aid for Trade Work for Inclusive Growth and Poverty Reduction." *Working Paper* No. 313. London: Overseas Development Institute.

Hoekman, B. 2010. "Aid for Trade: Why, What, and Where Are We?" *World Bank Report*. http://siteresources.worldbank.org/INTRANETTRADE/Resources/239054-1273092281133/Bernard_Hoekman_Aid_For_Trade.pdf

ILO (International Labout Organization). 2015. *Labour Standards in Global Supply Chains. Program of Action for Asia and the Garment Sector.* http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/publication/wcms_383562.pdf

International Trade Centre. 2011. "Sri Lanka: Company Perspectives—An ITC Series on Non-Tariff Measures." Technical Paper. Geneva: International Trade Centre. http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/NTM%20Report_Sri%20Lanka.pdf

International Trade Centre. 2016. "Social and Environmental Standards: Contributing to More Sustainable Value Chains." Geneva: International Trade Centre and European University

Institute. http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/1ITC-EUI_Social_environmental_standards_Low-res.pdf

ISEAL Alliance. 2013. "ISEAL Credibility Principles." London: ISEAL Alliance. https://www.isealalliance.org/sites/default/files/Credibility%20Principles%20v1.0%20low%20res.pdf

ISO (International Organization for Standardization). 2000. "ISO 9001:2000, Quality Management Systems—Requirements." https://www.iso.org/home.html

Jansen, M. 2015. "Workshop on the 2015 Aid-for-Trade at a Glance Publication and Aid-for-Trade Monitoring and Evaluation Exercise." Organised by the World Trade Organization, Geneva.

Kaplinsky, R. 2016. *Inclusive and Sustainable Growth: The SDG Value Chains Nexus*. Geneva: International Centre for Trade and Sustainable Development (ICTSD).

Kaplinsky, R., and M. Morris. 2014. "Developing industrial Clusters and Supply Chains to Support Diversification and Sustainable Development of Exports in Africa." African Import-Export Bank.

Kaplinsky, R., and M. Morris. 2017. *How Regulation and Standards Can Support Social and Environmental Dynamics in Global Value Chains*. Geneva: International Centre for Trade and Sustainable Development (ICTSD). (forthcoming)

Kastan, A. 2012. "The Potters of Thimi – Village Ceramics Traditions in Flux." http://anikasten.com/assets_d/33545/download_media/thimilayout_145.pdf

Keane, J., and K. Ellis. 2008. "A Review of Ethical Standards and Labels: Is There a Gap in the Market for a New 'Good for Development' Label." *ODI Working Paper* No. 297. London: Overseas Development Institute. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion files/3333.pdf

Lammersen, F., and M. Roberts. 2015. "Aid for Trade 10 Years On: Keeping It Effective." *OECD Development Policy Papers* No. 1. Paris: OECD Publishing. http://dx.doi.org/10.1787/5jrqc6q4xxr5-en

McAlister, Jodie. 2011. "Aid for Trade: Case Story: Tonga." Organisation for Economic Co-operation and Development and World Trade Organization. https://www.oecd.org/aidfortrade/47747338.pdf

Nadvi, K. 2008. "Global Standards, Global Governance and the Organization of Global Value Chains." *Journal of Economic Geography* 8 (3): 323–43. https://doi.org/10.1093/jeg/lbn003

Nadvi, K., and G. Raj-Reichert. 2015. "Governing Health and Safety at Lower Tiers of the Computer Industry Global Value Chain." *Regulation and Governance* 9: 243–58.

Natsuda, K., K. Goto, and J. Thoburn. 2009. "Challenges to the Cambodian Garment Industry in the Global Garment Value Chain." *RCAPS Working Paper* No. 09-3. Beppu-City, Oita: Ritsumeikan Center for Asia Pacific Studies.

OECD-DAC. 2017, "Creditor Reporting System (CRS)." CRS aid activity database. https://stats.oecd.org/Index.aspx?DataSetCode=CRS1

OECD/WTO. 2013. "Aid for Trade at a Glance 2013: Connecting to Value Chains." Organisation for Economic Co-operation and Development and World Trade Organization.

OECD/WTO. 2015. "Aid for Trade at a Glance 2015: Reducing Trade Costs for Inclusive, Sustainable Growth." Organisation for Economic Co-operation and Development and World Trade Organization.

OECD/WTO. 2017. "Aid for Trade at a Glance 2017: Promoting Trade, Inclusiveness and Connectivity for Sustainable Development." Organisation for Economic Co-operation and Development and World Trade Organization.

Rahman, M. C., M. A. Salam, N. M. F. Rahman, M. M. Rahman, and M. M. Hossain. 2013. "Present Status and Potentiality of Shrimp in Bangladesh." *Australian Journal of Basic and Applied Sciences* 7 (7): 281–6.

Redden, J. 2013. *Trade Development and the MDGs*. Institute for International Trade, University of Adelaide.

Smart Export. 2013. *The Export Portal*. Market Study for Product 610449.

Shepherd, B. 2016. *Trade Facilitation and Global Value Chains*. Geneva: International Centre for Trade and Sustainable Development (ICTSD).

STDF (Standards and Trade Development Facility). 2010a. "Annual Report." http://www.standardsfacility.org/sites/default/files/STDF_342_AnnualReport2010

STDF (Standards and Trade Development Facility). 2010b. "Indicators to Measure the Performance of a National SPS System." STDF/OECD Working Paper (draft) 1. http://www.standardsfacility.org/sites/default/files/DraftWorkingPaper_RevDec10_0.pdf

STDF (Standards and Trade Development Facility). 2015. "Inclusive Trade Solutions: Women in SPS Capacity Building." http://www.standardsfacility.org/sites/default/files/STDF_Briefing_note_13.pdf

STDF and EIF (Standards and Trade Development Facility and Enhanced Integrated Framework). 2016. "Enhancing SPS Capacity to Promote Trade for Development in Least Developed Countries: A Review of Diagnostic Trade Integration Studies." Geneva: World Trade Organization.

Stoler, A., J. Redden, and L. A. Jackson (eds). 2009. *Trade and Poverty Reduction in the Asia-Pacific Region*. Cambridge: Cambridge University Press.

United Nations. 2017. "The Sustainable Development Goals Report, 2017." https://unstats.un.org/sdgs/report/2017/

UNCTAD (United Nations Conference on Trade and Development). 2013. "Global Investment Report: Global Value Chains: Investment and Trade for Development." Geneva: UN Conference on Trade and Development.

UNDP (United Nations Development Programme). 2016. "Trade Winds of Change: Women Entrepreneurs on the Rise in South Asia." Bangkok Regional Hub, UN Development Programme.

Van Diermen, P. 2009. "Cambodia's Textile and Garment Industry." In *Trade and Poverty Reduction in the Asia-Pacific Region*, edited by A. Stoler, J. Redden, and L. A. Jackson. Cambridge: Cambridge University Press.

Viviers, W., S. Grater, and A. Parry. 2017. *Realising the Potential of Services SMEs in Developing Economies*. Geneva: International Centre for Trade and Sustainable Development (ICTSD).

World Bank. 2015. "World Bank Development Report 2015: Mind, Society and Behavior." Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/20597

World Bank. 2016. "World Bank Development Report 2016: Digital Dividends." Washington, DC: World Bank. http://www.worldbank.org/en/publication/wdr2016

World Bank. 2017. “Global Economic Prospects: A Fragile Recovery.” Washington, DC: World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/26800/9781464810244.pdf

World Fair Trade Organization. 2017. “10 Principles of Fair Trade.” http://wfto.com/fair-trade/10-principles-fair-trade

WTO (World Trade Organization). 2005. “The Sixth WTO Ministerial Conference.” World Trade Organization. https://www.wto.org/english/thewto_e/minist_e/min05_e/min05_e.htm

WTO. 2006. “Recommendations of the Task Force on Aid-for-Trade.” Geneva: World Trade Organization.

WTO. 2015. “Tenth WTO Ministerial Conference.” World Trade Organization. https://www.wto.org/english/thewto_e/minist_e/mc10_e/mc10_e.htm

WTO. 2017. “Enhanced Integrated Framework.” World Trade Organization. https://www.wto.org/english/tratop_e/devel_e/teccop_e/if_e.htm

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